BOLYAI SOCIETY
MATHEMATICAL STUDIES, 14

A Panorama of Hungarian Mathematics in the Twentieth Century, pp. 563–607.

Biographies

TÜNDE KÁNTOR-VARGA

A short note on the use of names of persons and institutions, and on pronunciation:

Quite a number of Hungarian mathematicians used several ways of writing their names on their publications during their career. In particular, till about 1950 it was a wide-spread habit to translate first names when writing in a foreign language, and use a generally accepted 'corresponding name' if the first name had no version in the given language. After the official (Hungarian) name of an author who followed this usage, we indicate other forms of the name used in publications which might be necessary for identifying the author, but we shall avoid, say, listing all the three of Georg, George, and Georges – we put only one of such easily recognisable variants.

Most universities in Hungary changed their names several times during the twentieth century. To cause less confusion, we always write University of Budapest, University of Debrecen, University of Szeged, and Budapest Technical University instead of the name valid in the given year. Likewise, we always write Mathematical Research Institute for the Mathematical Institute of the Hungarian Academy of Sciences, which also had three names during its history.

Finally, some words about how to pronounce Hungarian names. Writing is by and large phonetic, so knowing how to pronounce letters and some combinations of letters means that one is more or less on the safe side.

vowels:

a – as in n*au*ght but short; **á** – as in f*a*ther; **e** – as in l*e*t; **é** – as in c*a*pe or French th*é*; **i** – as in *i*t; **í** –as in sh*ee*t; **o** – as in n*o*t in Scottish pronunciation or French p*o*mme or German h*o*ffe; **ó** – as in *a*ll or French b*eau* or German B*oo*t; **ö** – as in French b*oeu*f or German L*ö*ffel; **ő** – as in French d*eu*x or German sch*ö*n; **u** – as in p*u*t; **ú** – as in m*oo*d; **ü** – as in French t*u* or German d*ü*nn; **ű** – as in French m*u*r or German fr*ü*h; **y** (at the end of family names) – as in *i*t.

There are no diphthongs in Hungarian except **au** (as in n*o*w) in some words of foreign origin.

Notice that the accents ´ or ˝ on a vowel mean that the vowel is long. Stress is always on the first syllable of a word, irrespective of lengths – e.g., in the name Fejér the *e* is short and stressed whereas the *é* is long but not stressed.

consonants:

represented by single letters: **b**, **d**, **f**, **k**, **l**, **m**, **n**, **p**, **r**, **t**, **v**, **z** are pronounced as you would expect;

c – as in *ts*ar; **g** – as in *g*et; **h** – as in *h*ouse, except at the end of a word where it is not pronounced; **j -** as in *y*es; **s** – as in *sh*eet; **w** – as in *v*eal; **x** – as in a*x*e;

double letters, such as **ll**, **nn**, **ss** etc. represent consonants which are pronounced long like *n* in u*nn*atural;

diagraphs, i.e., combinations of (usually) two letters which represent a single speech sound as *gh* in lau*gh*: **cs** – as in *ch*ur*ch*; **gy** – as in *d*uty; **ly** – as in *y*es; **ny** – as in o*ni*on; **sz** – as in *s*in (notice the difference to the Polish pronounciation of sz! this can be the source of some embarrassment); **ty** – as in vir*t*ue; **zs** – as in French *j*our; notice that in their long version the first letter is doubled, hence **ssz** – as in di*ss*erve.

Finally, there are also some traditional diagraphs preserved only in family names: *cz* stands for *c* (so the name "Vincze" is pronounced vin*ts*e, not vin*ch*e as it would be in Polish); *ts* stands for *cs*, *eő* stands for *ő*.

Biographies

ALEXITS György (also George) (Budapest, January 5, 1899 – Budapest, October 14, 1978) began his studies at the University of Budapest in 1917. During the Communist rule in 1919 he joined the socialist student federation, and therefore emigrated to Austria later in the same year. He continued his studies in Graz, where he obtained the Ph.D. in 1924. Returned to Hungary in 1924 and worked at an insurance company till 1926. Then he moved to Romania to help found the Romanian Communist Party; in 1926–27 he taught at a secondary school in Giurgiu and lectured also at the University of Bucharest. In 1927 he returned to Hungary and was a schoolteacher till 1940. In 1940–41 he taught at the University of Kolozsvár, from 1941 till 1944 at the Budapest Technical University. He took part in the resistance against the German occupation and was therefore deported to Dachau in 1944. After returning in 1945, he was school director till 1947. He became Deputy Minister of Education (1947–48). From 1948 to 1967 he was a professor at the Budapest Technical University, from 1967 to 1970 he worked at the Mathematical Research Institute. He was elected corresponding member of the Hungarian Academy of Sciences in 1948, ordinary member in 1949, and in 1949–50 the first Secretary General of the reorganized Hungarian Academy of Sciences. He was awarded the Kossuth Prize in 1951 and 1970, the Tibor Szele Prize in 1976. The main area of his scientific interest was geometry and analysis, mainly orthogonal series.

ALPÁR László (Nagyvárad [now Oradea, Romania], January 29, 1914 – Budapest, September 18, 1991) won the Eötvös Competition in 1932 and entered the University of Budapest but was soon expelled as a Communist. After holding several jobs and being arrested for political reasons several times, in 1937 he emigrated to France and continued his studies at the Sorbonne in Paris. Suspect of being Communist, he was interned from 1939 to 1944, then he escaped and joined the Résistance. He returned to Hungary in 1945 and worked in the trade union movement till 1949 when he was imprisoned in connection with a political process and interned in labour camps till 1953. Returned to a job in industry in 1953, was rehabilitated in 1956, then completed his studies at the University of Budapest and obtained his teacher's degree in 1957. From 1956 to 1991 worked at the Mathematical Research Institute. Obtained the degree of Candidate in 1961, Doctor of Mathematical Sciences in 1978. Field of research: complex function theory.

ARANY Dániel (Pest, July 11, 1863 – Budapest, January, 1945) entered the University of Budapest. After receiving his teacher's diploma was an assistant at the Forestry School in Selmecz (now Banska Štiavnica, Slovakia). In 1893 returned to teach at the secondary school he had attended in Győr. During a visit in Paris with a scholarship became acquainted with the Journal de Mathématiques Élémentaires, which gave him the idea of starting the Középiskolai Matematikai Lapok (Mathematical Journal for Secondary Schools, abbr. KöMaL) in 1894, the second such journal in the whole world. He moved to Budapest in 1894 and passed the editorship of KöMaL to László Rátz, who edited it until 1914. Arany was a secondary school teacher, active in nurturing young mathematical talent. He wrote a series of mathematics textbooks for students aged 12 to 18. Was sent into retirement in 1919, after which he worked as an actuary.

BAKOS Tibor (Szeged, June 8, 1909 – Budapest, December 12, 1998) won first prize in the Eötvös Competition in 1926, studied at the University of Budapest from 1926 to 1931 and was a member of the Eötvös Collegium. He became a schoolteacher and taught at various secondary schools till 1944. After captivity as a prisoner of war, he returned to Szeged in 1947. Three more years of teaching at a Gimnázium followed, then he got a position at the University of Szeged. From 1958 to 1974 he was the Editor in Chief of the secondary school journal KöMaL (see above), and even after retirement he was an active member of the Editorial Board till his death. He was a constant member on the Committees of several mathematical contests. He twice got the Beke Manó Prize (1957, 1965).

BÁLINT Elemér (Budapest, December 4, 1888 – Budapest, August 20, 1967) studied at the Budapest Technical University and obtained his teacher's diploma in 1911. He worked as a teacher and also taught descriptive geometry at the Technical University. Obtained his Ph.D. with a dissertation on the roots of polynomials. Did military service during World War I, lost his teaching position in 1919, and then worked in insurance. In 1951 he was appointed professor first at the Technical College, then at the Budapest Technical University. Areas of scientific interest: polynomials, numerical and graphical approximation methods.

BALOGH Zoltán (Debrecen, December 7, 1953 – Oxford, Ohio, USA, June 19, 2002) studied at the University of Debrecen. He took positions at the University of Debrecen and, from 1988, at Miami University in Oxford, Ohio, USA. He obtained the title of Candidate in 1980, and the title of

Doctor of Mathematical Sciences in 1989. Field of research: set-theoretical topology.

BARANYAI Zsolt (Budapest, June 23, 1948 – Budapest, April 18, 1978) studied at the University of Budapest from 1967 to 1972, took his Ph.D. at the same university in 1975 and obtained the title of Candidate posthumously. Had a position at the University of Budapest from 1972 till his untimely death. Beside working in mathematics, he was a widely known concert player on the recorder. Area of research: combinatorics, his most famous result is on hypergraphs.

BARNA Béla (Máramarossziget [now Sighet, Romania], March 30, 1909 – Debrecen, June 9, 1990) entered the University of Budapest in 1926 and switched to Debrecen in 1928. Obtained his teacher's diploma in 1931 and a Ph.D. in 1932. Lectured without salary at the University of Debrecen on number theory until 1935, then taught at various secondary schools. In 1951 he joined the staff of the University of Debrecen. In 1957 he became Candidate and in 1967 Doctor of Mathematical Sciences. Scientific interest: mean values and zeros of functions.

BAUER Mihály (also Michael) (Budapest, September 20, 1874 – Budapest, March 2, 1945) started publishing at the age of l8, and obtained his teacher's diploma in Budapest. After graduating he held various positions at the Budapest Technical University. In 1922 he was the first winner of the Gyula Kőnig Prize of the Eötvös Loránd Mathematical and Physical Society. He was sent into early retirement in 1936. Main areas of interest: algebra, number theory.

BEKE Manó (Pápa, April 24, 1862 – Budapest, June 27, 1946) entered the Budapest Technical University but soon switched to the University of Budapest. He obtained his teacher's diploma in 1883 and his Doctorate in 1884. He taught at a secondary school in Budapest until 1895, and spent the year 1892/93 in Göttingen with a scholarship. He became aware of the activities of Felix Klein concerning the reform of the teaching of mathematics, and after his return he became the leader of the reformers of teaching mathematics in Hungary. In 1895 he started teaching at the Mintagimnázium in Budapest. In 1900 he was appointed professor at the University of Budapest. Between 1906 and 1909 he was the Chairman of the Commission to reform the teaching of mathematics in secondary schools. Became a corresponding member of the Hungarian Academy of Sciences in 1914. After World War I the Council of the University started a disciplinary investigation against him because of his political activity,

and in 1922 he was stripped of his position at the University and of his membership in the Academy, following which he worked for a publisher. His book on Differential and Integral Calculus was the textbook for several generations of mathematics students. Areas of scientific interest: linear differential equations, determinants, problems from physics. In 1951 the Bolyai János Mathematical Society inaugurated the Beke Manó Prize for outstanding results in the teaching and the popularization of mathematics.

BIHARI Imre (Budapest, June 20, 1915 – Budapest, September 9, 1998) studied in Budapest between 1933 and 1938. Taught in secondary schools in Budapest in 1942–50, then had a position at the Budapest Technical University until 1962. Obtained the title of Candidate in 1962 and of Doctor of Mathematical Sciences in 1979. In 1962 he switched to the Mathematical Research Institute. Scientific area: non-linear differential equations: oscillation, inequalities.

BIRÓ Balázs (Budapest, September 21, 1955 – Budapest, December 27, 1997) graduated from the University of Budapest in 1979. First he worked as a programmer at an institute for computation, then from 1983 he was at the Mathematical Research Institute, first with a research scholarship and from 1986 in a regular position. He obtained the title of Candidate in 1989. Field of research: algebra, algebraic logic.

BORBÉLY Samu (also von Borbély) (Torda [now Turda, Romania], April 23, 1907 – Budapest, August 14, 1984). Studied at the Technische Hochschule Charlottenburg in Berlin from 1926. In 1929 he was a student-assistant at the Applied Mathematics Department of R. Rothe and later at the Mathematics Department of G. Hamel. Obtained the diploma of Engineer-Mathematician in 1933 and at the same time was appointed assistant. In 1934 he switched to the Institute for Aviation Technology of the Technical University. In 1938 he obtained the title of Doctor of Engineering (Dr. Ing.) with his work on airfoil theory. In 1940 a position was offered to him at the University of Kolozsvár, where he held various positions till 1944. As an expert in aviation, he was arrested May 4, 1944 by the Gestapo and transported to Berlin. He was set free in the middle of September, 1944. He returned to Kolozsvár in 1945, where he became a professor in the Department of Mathematics and Geometry at the short-lived Bolyai University. He returned to Hungary and had positions from 1949 to 1955 at the Technical University for Heavy Industry in Miskolc, from 1955 to 1977 at the Budapest Technical University, between 1960 and 1964 at the University of Magdeburg. He became a corresponding member of the Hungarian

Academy of Sciences in 1946, and ordinary member in 1979. Scientific interest: mathematical physics, numerical and computerized integration.

BRINDZA Béla (Csongrád, September 18, 1958 – Debrecen, November 2, 2003) studied a year in Szeged and then in Debrecen. After his studies he worked mainly at the University of Debrecen but also spent 3 years with a research fellowship at Macquarie University in Sydney, Australia, and taught 4 years at the University of Kuwait. Obtained the title of Candidate in 1986 and of Doctor of Mathematical Sciences in 1999. Field of research: diophantine equations.

BUZÁSI Károly (Püspökladány, July 16, 1930 – Debrecen, August 7, 1988). His family moved to Ungvár [later Uzhgorod, Soviet Union, now Uzhhorod, Ukraine] in 1940. After graduating from secondary school he registered at the University of Uzhgorod as a student by correspondence because at the same time he taught as a schoolteacher. In 1953 he became a regular student. Obtained his degree and moved to Hungary in 1956. Taught at secondary schools in Debrecen until 1961. From 1961 to 1988 he held various positions at the University of Debrecen. Was a guest professor at the University of Plovdiv (Bulgaria) in 1963/64, obtained his degree of Candidate in Kharkov, Soviet Union, in 1968. The degree of Doctor of Mathematical Sciences was awarded to him posthumously. Areas of scientific interest: representations of finite groups, coding theory.

CSILLAG Pál (also Paul) (Budapest, April 17, 1896 – Budapest, December 24, 1944) studied in Budapest and obtained the Ph.D. from the University in 1921. Worked as a mathematician in industry. Areas of interest: harmonic analysis, complex function theory.

CZIPSZER János (Budapest, November 16, 1930 – Budapest, June 15, 1963) won first prize in the Kürschák competition in 1948, studied at the University of Budapest. In 1953 he joined the Mathematical Research Institute. He collaborated with several distinguished authors, but did not seek scientific degrees because of exaggerated modesty. Scientific areas: approximation, geometry, topology, applied mathematics.

DÁVID Lajos (also Ludwig von Dávid) (Kolozsvár [now: Cluj-Napoca, Romania], May 28, 1881 – Leányfalu, January 9, 1962) studied at the University of Kolozsvár. Obtained his Doctor's Diploma in 1904, after which he spent time in Göttingen and in Paris. Taught at various secondary schools. Habilitated in Kolozsvár in 1910. From 1914 taught in Budapest and in 1916 habilitated in Budapest. From 1919 to 1929 he was a

professor at a Teacher's College in Debrecen, and from 1925 he also lectured at the University of Debrecen, where he became a professor in 1929. He organized the Mathematical Seminar and Library in Debrecen and was the founding editor of the journal Proceedings of the Mathematical Seminar of the University of Debrecen (in Hungarian, 1928–1940). Between 1940 and 1944 he was a professor at the University of Kolozsvár. In 1944 he returned to Budapest. His main scientific interest was the work of Gauss and of the Bolyais.

DEÁK Jenő (Budapest, March 1, 1948 – Budapest, February 8, 1995) studied at the University of Budapest. He obtained the degree of Candidate in 1980. Worked at the Mathematical Research Institute. Areas of interest: summability, general topology.

DÉNES József (Budapest, April 16, 1932 – Budapest, August 19, 2002) attended the University of Budapest. He obtained the degree of Candidate in 1961. Held various positions in applied mathematics and computer science in Budapest: 1954–1964 Ministry of the Interior, 1964–1969 Central Research Institute of Physics, 1969–1988 Institute for Coordination of Computer Techniques. Main fields of interest: combinatorics, combinatorial methods in algebra, coding theory.

DIENES Pál (also Paul) (Tokaj, November 24, 1882 – Turnbridge (England), March 23, 1952) studied at the University of Budapest but spent a year in Paris, where he came into contact with Jacques Hadamard, Émile Picard and Paul Appell. Starting with 1904 taught at a secondary school in Budapest. Returned to Paris in 1908–10, where he obtained the degree of "docteur ès sciences" at the Sorbonne. Dienes came from a politically left-wing family. As a Communist, he became the Political Comissar of the University of Budapest during the Hungarian Communist regime in 1919, and was charged with organizing the School of Science of the newly founded University of Debrecen. After the fall of the Soviet Republic, he fled Hungary and obtained a position at the University of Wales with the help of Hadamard in 1921. Moved later to Swansea and in 1929 to Birkbeck College in London. Became a professor in 1946 at the age of 63. Areas of interest: complex analytic functions, differential geometry, infinite matrices.

EGERVÁRY Jenő (also Eugen) (Debrecen, April 16, 1891 – Budapest, November 30, 1958) studied at the University of Budapest, from where he obtained his Doctor's Diploma in 1914. He worked first at the Seismological Observatory in Budapest and then at a secondary school. In 1932 he obtained the Gyula Kőnig Prize. In 1938 he habilitated at the

University of Budapest, and was appointed professor at the Budapest Technical University in 1941, where he organized a research group in applied mathematics. In 1950 he became the Chairman of the Scientific Council of the newly founded Research Institute for Applied Mathematics of the Hungarian Academy of Sciences, predecessor of the Mathematical Research Institute. He was elected a corresponding member of the Academy in 1943, ordinary member in 1946, and received the Kossuth Prize in 1949 and in 1953. He was the editor of the problems section of several journals. His scientific interest was very broad: classical function theory (polynomials and trigonometric polynomials), geometry, differential and integral equations, matrix theory and numerical methods, optimization, mathematical physics, applications of mathematics to engineering.

ELBERT Árpád (Kaposvár, December 24, 1939 – Budapest, April 25, 2001) studied at the University of Budapest, after which he became a member of the Mathematical Research Institute. Candidate in 1971, Doctor of Mathematical Sciences in 1989. Scientific interest: ordinary differential equations, semilinear differential equations, functions of a real variable, special functions.

ERDŐS Jenő (Hajdúszovát, June 7, 1931 – Debrecen, January 16, 2004) studied at the University of Debrecen, then taught at the same university. He took the Candidate degree in 1960. Field of research: abelian groups.

ERDŐS Pál (also Paul) (Budapest, March 26, 1913 – Warsaw, Poland, September 20, 1996). Both his parents were mathematics-physics teachers who tutored him at home. In secondary school, he was one of the most successful problem solvers of KöMaL, among whom his later group of friends was recruited: Tibor Gallai, Géza Grünwald, Pál Turán, Eszter Klein, Márta Wachsberger, György Szekeres, Endre Vázsonyi, László Alpár, Dezső Lázár. He studied in Budapest from 1930 to 1934, then with the help of L. J. Mordell obtained a scholarship to Manchester, UK, where he met the first ones of his more than four-hundred co-authors: György Pólya, Richard Rado, Stan Ulam, Chao Ko, Harold Davenport. In October 1938 he left Europe to spend a year and a half at the Institute for Advanced Study in Princeton, New Jersey, USA, then had temporary positions at various universities in the USA, and after World War II he spent also some time in Great Britain. In the United States he got into trouble because he corresponded with the Chinese mathematician Loo-Keng Hua, and when he wanted to go to the 1954 International Congress in Amsterdam,

Netherlands, he was told that once he left the United States, he would not be permitted to return. Erdős, who valued his liberty above everything else and was ready to make enormous financial sacrifices to travel where and when he wanted, could not accept this. He left and was allowed to return for a short visit only in 1959. After 1955 Budapest was his home base. He became corresponding member of the Hungarian Academy of Sciences in 1956, ordinary member in 1962. He travelled constantly, was in India one day, in Australia the next, and went, say, to California from there, since after a while he was free to enter the US. He died while attending a conference in Warsaw, Poland. He obtained the Kossuth Prize in 1958 and the State Prize in 1983, the Tibor Szele Prize in 1971, was member of eight academies on four continents, and was awarded fifteen honorary doctorates. In 1984 he got the Wolf Prize, and in 1991 the Gold Medal of the Hungarian Academy of Sciences. His interest covered mainly number theory, approximation, probability, combinatorics, graph theory, set theory but he has many publications in other fields as well: if anyone came to him with a problem, he was likely to be able to solve it. His ability to state open problems was legendary. He cared deeply about people, was extremely generous, and worried about the fate of mankind.

FARAGÓ Andor (Budapest, September 26, 1877 – 1944). He attended the University of Budapest, then taught at various secondary schools. His enormous merit was to restart in 1924 the Mathematical Journal for Secondary Schools (KöMaL), founded by Dániel Arany and László Rátz, and to edit it at a high level until 1939. He perished during World War II, details are not known.

FARKAS Gyula (also Julius) (Sárosd, March 28, 1847 – Pestszentlőrinc [now part of Budapest], December 27, 1930) attended the Benedictine Gimnázium in Győr. Under the influence of his teacher the famous physicist Ányos Jedlik he got interested in physics, and studied physics and chemistry at the University of Budapest. Taught at a secondary school between 1870 and 1874, and was the tutor of the children of count Géza Batthyány from 1874 to 1880, where he had the opportunity to perform experiments in the home laboratory. On a trip abroad he became acquainted with Charles Hermite. In 1880 he obtained his doctorate, and in 1881 became a "Privatdozent" in the field of complex function theory at the University of Budapest. In 1887 he became a professor of Theoretical Physics at the University of Kolozsvár. Corresponding member of the Hungarian Academy of Sciences in 1898, ordinary member in 19l4. He was president of the science section of the Transylvanian Museum Society. His efforts made the

University of Kolozsvár achieve a distinguished level. In 1892 he obtained the honorary doctorate of the University of Padova. Areas of interest: mechanics, thermodynamics, linear inequalities, complex function theory, iteration of functions, work of Bolyai.

FÁRY István (Gyula, June 30, 1922 – Berkeley, California, USA, November 2, 1984) entered the University of Budapest and the Eötvös Collegium in 1940. He obtained his Ph.D. from the University of Szeged in 1948. The same year he moved to Paris where he got a position at the Centre National de la Recherche Scientifique. In 1955 he obtained the degree of "docteur ès sciences" under Jean Leray, after which he went to the Université de Montréal. From 1957 to 1971 he held a position at the University of California at Berkeley, USA. Areas of interest: graph theory, packing and covering, differential geometry, topology, algebraic geometry.

FEJÉR Lipót (also Leopold) (Pécs, February 9, 1880 – Budapest, October 15, 1959) won second prize in the Eötvös Competition. Entered the Budapest Technical University first to study mechanical engineering, then switched to the program preparing secondary school teachers, and finally transferred to the University of Budapest. He spent the year 1899-1900 at the University of Berlin, where Hermann Amandus Schwarz had an influence on him, and where he came into contact with Constantin Carathéodory and Erhardt Schmidt. He obtained his Ph.D. in 1902, spent some time in Göttingen and Paris, and in 1905 he habilitated and obtained a position at the University of Kolozsvár. In 1911 he moved to the University of Budapest, where he spent the rest of his life. He was the first mathematician in Hungary around whom a real school has emerged. Just a few prominent names from his pupils: Egerváry Jenő, Erdős Pál, Fekete Mihály, Lukács Ferenc, Pál Gyula, Pólya György, Riesz Marcel, Sidon Simon, Szász Ottó, Szegő Gábor, Turán Pál. He was elected a corresponding member of the Hungarian Academy of Sciences in 1908 and an ordinary member in 1930. In 1935 he was awarded an honorary doctorate from Brown University in Providence, Rhode Island, USA, in 1948 he was the recipient of one of the first Kossuth Prizes awarded. He was a member of the Bavarian and of the Polish Academies and of the Königliche Gesellschaft der Wissenschaften zu Göttingen. Fields of interest: Fourier series, interpolation, complex variables, mechanics.

FEJES TÓTH László (also Ladislaus Fejes) (Szeged, March 12, 1915 – Budapest, March 17, 2005) studied at the University of Budapest. From 1941 to 1944 he was an assistant at the University of Kolozsvár. He taught

at a secondary school in Budapest from 1945 to 1948. He habilitated at the University of Budapest in 1946 and from 1949 he was a professor at the University for Chemical Industry in Veszprém. In 1964 he was invited to head the Chair of Geometry at the University of Zurich, Switzerland, but the Hungarian authorities did not allow him to accept the offer. From 1965 he worked at the Mathematical Research Institute in Budapest, of which he was the director between 1970 and 1983. Taught also at numerous foreign universities. He was elected corresponding member of the Hungarian Academy of Sciences in 1962, ordinary member in 1970. He was awarded the Kossuth Prize in 1957, the State Prize in 1973, the Tibor Szele Prize in 1977, and a Gauss Bicentennial Medal in 1977. He was elected corresponding member of the Sächsische Akademie der Wissenschaften and of the Wissenschaftliche Gesellschaft Braunschweig, and received an honorary doctorate from the University of Salzburg. In 2002 he was awarded the Gold Medal of the Hungarian Academy of Sciences. His main interest was geometry, in particular covering and filling problems.

FEKETE Mihály (also Michael) (Zenta [now Senta, Serbia], July 19, 1886 – Jerusalem, Israel, May 13, 1957). He attended the University of Budapest, obtained his Ph.D. in 1909 with a dissertation on number theory, after which he spent a year in Göttingen, where he worked with Landau. After returning to Budapest he was an assistant of Manó Beke, when he became acquainted with Fejér, who influenced his further research interests. Habilitated in 1914 but taught at various secondary schools in Budapest. In1920 he lost his job as a teacher and started to work in insurance. He was the tutor of John von Neumann. In 1925 he obtained a teaching position at the Reáliskola of the Budapest Jewish Congregation. He received an invitation from the Hebrew University of Jerusalem in 1928, where he held various positions, among others Director of the Albert Einstein Institute. In 1955 he was awarded the Israeli Prize for Exact Sciences. His interest was complex function theory, polynomials, approximation, summability of Fourier series.

FELDHEIM Ervin (Kassa [now Košice, Slovakia], September 21, 1912 – Bor, Yugoslavia, 1944). He studied in Paris and obtained the degree of "docteur ès sciences". After returning to Hungary worked in an insurance company. Scientific interest: interpolation, polynomials.

FÉNYES Tamás (Budapest, July 7, 1929 – Budapest, April 30, 2000). He studied engineering at the Budapest Technical University between 1947 and 1952. From 1951 to 1953 he worked in industry as an electrical engineer.

From 1953 he had a position at the Mathematical Research Institute. He became a Candidate in 1967. Field of research: differential equations, distributions, applications.

FENYŐ István (also Stefan) (Budapest, March 5, 1917 – Budapest, July 28, 1987). He obtained a mathematics-physics teacher's diploma at the University of Budapest in 1939, and in 1942 a diploma in chemistry. Worked as a chemist in industry between 1942 and 1945. In 1945 he obtained a position at the Budapest Technical University. Habilitated in 1950. He spent several years teaching in Rostock (then German Democratic Republic). Areas of interest: complex function theory, mean values, integral equations, applied mathematics.

FODOR Géza (Szeged, May 6, 1927 – Szeged, September 28, 1977) attended the University of Szeged. After graduating worked at the Szeged branch of the Mathematical Research Institute. From 1959 he was at the University of Szeged. In 1954 he obtained the degree of Candidate, in 1967 Doctor of Mathematical Sciences. In 1973 he was elected corresponding member of the Hungarian Academy of Sciences. Research interest: logic, set theory.

FREUD Géza (Budapest, January 4, 1922 – Columbus, Ohio, USA, September 27, 1979) obtained a degree in mechanical engineering from the Budapest Technical University in 1950 and then worked at the Institute of Physics first at the University of Budapest, then at the Budapest Technical University. Obtained the degree of Candidate in 1954, and in 1957 that of Doctor of Mathematical Sciences. From 1954 to 1974 he had a position at the Mathematical Research Institute. Was awarded the Kossuth Prize in 1959. In 1974 he left Hungary and, after some visiting professorships, in 1976 he took a position at the Ohio State University in Columbus, USA. Areas of interest: approximation, interpolation, Tauberian theorems, orthogonal polynomials, partial differential equations.

FREY Tamás (Budapest, June 23, 1927 – Budapest, April 6, 1978). Studied at the Budapest Technical University and obtained a diploma in electrical engineering in 1950, after which he took a position at the same University. He became a Candidate in 1956 and Doctor of Mathematical Sciences in 1970. From 1962 he was at the Institute of Computation of the Hungarian Academy of Sciences, of which he was the director between 1963 and 1969. In 1969 he returned to the Technical University. Fields of interest: approximation, qualitative theory of differential equations, simulation

problems, programming, computer science, applications to technology and biology.

GALLAI Tibor (Budapest, July 15, 1912 – Budapest, January 2, 1992) won first prize at the Eötvös Competition in 1930 and then studied at the University of Budapest, where he became a member of the group of friends of Pál Erdős. After taking his diploma, he worked in insurance and in the industry until 1939. Under the influence of Dénes Kőnig he got interested in graph theory. In 1940 he took a Ph.D. from the University of Budapest. From 1945 to 1949 he taught at a secondary school. In 1949 he became a professor at the Technical University and in 1952 he obtained the degree of Candidate. For his work in mathematical education he received the Kossuth Prize in 1956. Being an extremely modest person, he resigned his professorship in 1958, joined the Mathematical Research Institute and at the same time taught at a secondary school. He became Doctor of Mathematical Sciences in 1988 and a corresponding member of the Hungarian Academy of Sciences in 1990. He was awarded the Tibor Szele Prize in 1972. His main research interest was the theory of graphs.

GEŐCZE Zoárd (Budapest, August 23, 1873 – Budapest, November 26, 1916) attended the University of Budapest. He taught at various secondary schools. While spending a year in Paris, he wrote a difficult paper on surface area. In 1910 he was again in Paris, obtained a doctorate at the Sorbonne. After that he taught at a secondary school in Budapest, and became in 1913 "Privatdozent" at the University of Budapest. His fundamental work on surface area got appreciation only later, mainly through the work of Tibor Radó.

GERGELY Jenő (also Eugen) (Kolozsvár [now Cluj-Napoca, Romania], March 4, 1896 – Cluj-Napoca, May 15, 1975) studied at the University of Kolozsvár, where Frigyes Riesz was one of his teachers. He became Riesz's assistant and obtained his Ph.D. under him. When the University moved to Szeged, he resigned his position and remained in Kolozsvár, where he taught at a secondary school. In 1948 he was appointed lecturer at the Bolyai University (later Babeş–Bolyai University) of Kolozsvár, where he remained until his death. Areas of interest: descriptive geometry, geometry of ovals, differential geometry, the geometry of Hilbert spaces, work of János Bolyai.

GOLDZIHER Károly (also Charles, Karl) (Budapest, February 26, 1881 – Budapest, November 6, 1955) was the son of Ignác Goldziher, an internationally known orientalist. Studied in Budapest and then in Göttin-

gen, where under the influence of Felix Klein he became interested in applied mathematics. He taught in Budapest, first in a secondary school and from 1908 at a Teacher's College. In 1911 he habilitated at the Technical University. In 1920 he returned to teach in secondary school, in 1935 became an extraordinary professor at the Technical University, and after World War II an ordinary university professor. In 1952 he obtained the title of Doctor of Mathematical Sciences. Areas of interest: statistics, actuarial mathematics, mathematical education.

GROSSCHMID Lajos (also Louis de Grosschmid, Ludwig von Grosschmid) (Nagyvárad [now Oradea, Romania], April 21, 1886 – Budapest, June 13, 1940). Attended the University of Budapest, where he obtained his doctorate in 1911 and became the assistant of Manó Beke. In 1912/13 studied in Göttingen, Munich and Paris. Habilitated in 1918 at the University of Budapest in the theory of algebraic number fields. In 1919 he was appointed extraordinary professor of business mathematics at the College of Economics of the Technical University, and in 1924 ordinary professor. In 1916 he was elected member of the St. Stephen Academy, and in 1936 corresponding member of the Hungarian Academy of Sciences. Fields of interest: number theory, algebra (mainly the algebra of quadratic forms), ballistics, probability, business mathematics.

GRÜNWALD Géza (Budapest, October 18, 1910 – September 7, 1942) was a schoolmate and friend of Pál Erdős. Lajos Erdős, the father of Pál, supported him, because his father, a house painter, had problems in sending his two sons to school. Since he could not register at any University in Hungary, he started his studies in Italy. With the help of Alfréd Haar, he was finally admitted to the University of Szeged, where he won all the mathematical prizes. He obtained his teacher's diploma in 1936 and from 1937 on he worked as an applied mathematician at the "Tungsram" electric factory with the physicist Zoltán Bay. In 1952 the János Bolyai Mathematical Society established in his memory the Géza Grünwald Prize, given each year to young researchers. Scientific interest: Lagrange interpolation, strong summability of Fourier series, complex variables.

GRYNAEUS István (also Etienne) (Eperjes [now Prešov, Slovakia], March 21, 1893 – Budapest, September 28, 1936). He entered the University of Budapest and was a member of the Eötvös Collegium but was drafted at the beginning of World War I. Was taken prisoner in 1915 on the Russian front and returned home only in 1920. He obtained his mathematics-physics teacher's diploma in 1921, became an assistant and was awarded his Ph.D.

in 1922. Spent the year 1925-26 in Paris with a Rockefeller Fellowship, then continued in Delft (Holland). Habilitated to "Privatdozent" in 1932 and after that was an instructor at the Eötvös Collegium and at the Teacher's College. Scientific research areas: differential geometry, differential equations, Pfaff systems.

GYARMATHI László (Petrozsény [now Petroşani, Romania], June 24, 1908 – Debrecen, September 7, 1988) entered the University of Budapest and the Eötvös Collegium in 1926, obtained his teacher's diploma in 1931. Taught at various secondary schools in Debrecen. In 1948 he obtained a diploma as a teacher of descriptive geometry at the Technical University of Budapest. He obtained his Ph.D. in 1950 and the degree of Candidate in 1966. From 1951 to 1974 he taught at the University of Debrecen. Main areas of interest: descriptive geometry of several dimensions, projective and non-euclidean geometry.

GYÍRES Béla (Zagreb, Croatia, March 29, 1909 – Budapest, August 26, 2001) attended the University in Budapest (1928-1933), then taught at secondary schools. Obtained a Ph.D. in 1941 from the Budapest Technical University. In 1943 he became an assistant at the Commercial College in Kassa [now Košice, Slovakia], and starting with 1945 he was at the University of Debrecen. In 1946 he habilitated, became a Candidate in 1952, Doctor of Mathematical Sciences in 1962. He was elected corresponding member of the Hungarian Academy of Sciences in 1987, ordinary member in 1990. He obtained the State Prize in 1980. Fields of research: linear algebra, probability theory and statistics.

HAAR Alfréd (Budapest, October 11, 1885 – Szeged, March 16, 1933) won first prize in the Eötvös Competition in 1903. Started to study chemistry at the Budapest Technical University but soon transferred to the University of Budapest. Between 1905 and 1909 he studied in Göttingen, Germany. In 1909 he obtained his Ph.D. there under the direction of David Hilbert, and very soon after he became a "Privatdozent". Taught very briefly as a substitute at the Eidgenössische Technische Hochschule in Zurich, Switzerland, and in 1912 was appointed extraordinary professor at the University of Kolozsvár, and ordinary professor there in 1917. After World War I he spent some time in Budapest, and in 1920 together with Frigyes Riesz he founded the Mathematical Institute of the then new University of Szeged. In 1922 the two started the journal Acta Scientiarum Mathematicarum of the University of Szeged. He was elected corresponding member of the Hungarian Academy of Sciences in 1931. Scientific interests:

orthogonal functions, partial differential equations, calculus of variations. The Haar system of functions and the Haar measure on a locally compact group carry his name.

HAJÓS György (also Georg) (Budapest, February 21, 1912 – Budapest, March 17, 1972). He was the grandson of Adam Clark, builder of the Chain Bridge in Budapest. Obtained his teacher's diploma in 1929 from the University of Budapest and taught in secondary schools until 1935, when he got a position at the Budapest Technical University. Obtained his Ph.D. in 1938. In 1949 he became professor at the University of Budapest. Was elected corresponding member of the Hungarian Academy of Sciences in 1948, ordinary member in 1958. He was a member of the Romanian Academy of Sciences and of the German Leopoldina Academy, was awarded the Kőnig Gyula Prize of the Mathematical Society in 1942, the Kossuth Prize twice (1951, 1962). His most famous result is the solution of a conjecture of Minkowski in convex geometry, which he transformed into a problem in abelian group theory. Field of research: geometry, graph theory.

HARSÁNYI János (also John C.) (Budapest, May 29, 1920 – Berkeley, California, USA, August 9, 2000). Attended the Lutheran Evangelical Gimnázium in Budapest and was a problem solver for KöMaL. Studied philosophy, sociology and psychology at the University of Budapest and obtained his Ph.D. in philosophy in 1947. Emigrated to Australia in 1950. Studied economics at the University of Sydney in 1950-53, taught at the University of Queensland in 1953-56 and at the Australian National University (Canberra) in 1958-61. He moved to the USA in 1961, was first a professor at Wayne State University (Detroit, Michigan) in 1961/63, then at the University of California at Berkeley from 1965 to 1990, and a professor emeritus after that. He was awarded the Nobel Prize in Economics in 1994 jointly with John Nash and Reinhard Selten for their work on non-cooperative games. Areas of interest: economics, game theory.

HOSSZÚ Miklós (Somogyszob, March 7, 1929 – Budapest, June 4, 1980) graduated from the University of Budapest in 1951. He obtained the degree of Candidate in 1957, Doctor of Mathematical Sciences in 1964. He taught at the Technical University for Heavy Industry in Miskolc, 1951–1972, and then at the University for Agriculture in Gödöllő, 1972–1980. Scientific interest: functional equations in algebraic structures, in particular in quasigroups, and mathematical programming.

HUHN András (Szeged, January 26, 1947 – Budapest, June 6, 1985) studied at the University of Szeged and after graduating took a position

there. Obtained his Ph.D. in 1972 and the degree of Candidate in 1975. Spent the year 1978/79 at the University of Manitoba (Canada). In 1985 he went to Darmstadt with a Humboldt fellowship. Area of scientific interest: algebra, mainly the theory of lattices.

HUNYADY Jenő (also Eugene de Hunyady) (Pest, April 28, 1838 – Budapest, December 29, 1889) lived in the 19$^{\text{th}}$ century, still we decided to include his biography here because those who were active in algebra at the beginning of the 20$^{\text{th}}$ century (Beke Manó, Kőnig Gyula, Kürschák József, Rados Gusztáv) were under his influence. He attended secondary school in Pest. His father was a well-situated physician who could send his son to study mathematics in Berlin with Kummer, Kronecker, Clebsch. Hunyady obtained a Ph.D. in Göttingen with a dissertation on algebraic curves. Returning to Hungary in 1865, he habilitated at the Budapest Technical University in 1866, where he was appointed professor in 1869. In 1867 he was elected corresponding member of the Hungarian Academy of Sciences. Scientific interests: algebra, mainly linear algebra and algebraic geometry.

JOÓ István (Sárvár, September 19, 1948 – Budaörs, December 8, 1998). He graduated in 1973 from the University of Budapest and obtained a Ph.D in the same year. From 1975 to 1995 he taught at the University of Budapest. Became a Candidate in 1980. In 1980/81 he was a visiting professor at the Moscow State University, and in 1986/87 at the Ohio State University. Areas of scientific interest: approximation theory, number theory, convex analysis, differential equations with applications to physics, engineering and biology, control theory, game theory.

JORDÁN Károly (also Charles) (Pest, December 16, 1871 – Budapest, December 24, 1959). He studied abroad, in Paris, France, at the École Polytechnique, and obtained a diploma of Chemical Engineering at the Eidgenössische Technische Hochschule of Zurich, Switzerland, in 1893. Then worked one year in the Perkins Laboratory at Owen's College of the Victoria University of Manchester, England, and in 1894 became assistant at the University of Geneva, Switzerland, where he obtained a doctorate in physics and became a "Privatdozent" in physics. Between 1896 and 1899 he was employed as a chemical engineer at the Société d'Études Electrochimiques of Geneva and at a factory in Laibach, Austria [now Ljubljana, Slovenia]. Returned to Budapest in 1899 where he validated his engineer's diploma at the Technical University and his Ph.D. at the University of Budapest. Continued his studies at the University of Budapest attending courses in seismol-

ogy, astronomy and mathematics. From 1909 to 1913 he was the head of the Seismological Institute. During World War I he worked as a meteorologist and taught mathematics and physics at the military school in Várpalota. In 1919/20 he lectured at the University on statistics, and between 1920 and and 1950 at the University of Economics of Budapest. In 1923 he became "Privatdozent", in 1933 extraordinary professor, in 1940 ordinary professor. Obtained the Gyula Kőnig Prize in 1928, the Kossuth Prize in 1956 and was elected a corresponding member of the Hungarian Academy of Sciences in 1947. Areas of scientific interest: probability, statistics, calculus of finite differences, interpolation.

KALMÁR László (Edde-Alsóbogátpuszta, March 27, 1905 – Mátraháza, August 2, 1976) won the Eötvös Competition in 1922. He attended the University in Budapest, was a member of the Eötvös Collegium, and obtained his Ph.D. in 1927, simultaneously with his graduation. Spent one year in Germany, where he became interested in logic under the influence of Hilbert. He was offered an assistantship at the Physics Institute of the University of Szeged but soon switched to the Mathematical Institute, where he remained the rest of his life. He was elected corresponding member of the Hungarian Academy of Sciences in 1941 and ordinary member in 1961. He was awarded the Gyula Kőnig Prize in 1936, the Kossuth Prize in 1950, the State Prize in 1975, the Tibor Szele Prize in 1970. The János Bolyai Mathematical Society named a competition for general school students after him. Areas of interest: interpolation, logic, computer science. He built the first computer in Hungary.

KALUZSAY Károly (Facskó [now Fačkov, Slovakia], December 28, 1889 – Nosowce [now Ukraine], August 10, 1916) studied at the University of Kolozsvár in 1908–1914. In 1913/14 he was an assistant at the Institute for Applied Physics and Electrotechnics. His Ph.D. dissertation on the converse of the Jordan theorem, which is his only publication, was written under Frigyes Riesz. From 1911 on he taught at a "higher elementary school" for girls, where Gyula Szőkefalvi Nagy was the principal. He was drafted on January 15, 1915, and disappeared in a battle. Frigyes Riesz wrote to his brother Marcel in 1917: "the most gifted of my former students, Dr. Kaluzsay Károly, disappeared on the Russian front more than a year ago".

KÁRMÁN Tódor (also Theodore von Kármán) (Budapest, May 11, 1881 – Aachen, May 7, 1963). His father Mór was responsible for the 1879 curriculum for secondary schools, and founded the Teacher's College and its practice school, the Mintagimnázium in Budapest. He was tutored at

home in elementary school and then attended the Gimnázium founded by his father, from where he graduated in 1898 and won the Eötvös Competition. Studied mechanical engineering from 1898 to 1902 at the Budapest Technical University, where he obtained a prize in mechanics. After military service he was an assistant at the Budapest Technical University and worked as an engineer at the Ganz mechanical factory. In 1906 he traveled with a scholarship to Göttingen, Germany, where he got into contact with Felix Klein and L. Prandtl. It is there that he wrote his doctoral thesis in 1908 and became a "Privatdozent" in 1909. He spent some time in Berlin and Paris where he became interested in the theory of aviation. In 1912 he was appointed professor at the School for Mining and Forestry in Selmecbánya [now Banská Štiavnica, Slovakia], but since he was not able to pursue his research there, with the help of Felix Klein he was appointed University Professor at the Technical School of Aachen, Germany, where he founded the Aeronautical Research Institute. During World War I he served in the Austro-Hungarian Army and collaborated in the development of a helicopter. After the war he returned to Hungary, worked at the Budapest Technical University. Since he also worked at the Education Commisariat during the Hungarian Soviet Republic, he subsequently had to leave Hungary. From 1919 to 1930 he was again in Aachen. In 1934 he settled at the California Institute of Technology, USA, where he became the director of the Guggenheim Aeronautical Laboratory. In the 1940's he founded the Jet Propulsion Laboratory and the Aerojet Engineering Corporation. He was a member of twenty academies, in particular, of the Royal Society beginning in 1946. He had numerous honorary doctorates, obtained the National Medal of Science in 1963, and many other distinctions. He was the first president of the International Austronautical Academy. Scientific interests: hydro- and aerodynamics (von Kármán vortex street), structure of crystals, thermodynamics, rocketry.

KÁRTESZI Ferenc (Cegléd, February 13, 1907 – Budapest, May 9, 1989). His first article "The Tetrahedron", written while he was still in school, was published in KöMaL. Attended the University of Budapest. He obtained his diploma as a mathematics-descriptive geometry teacher in 1930, after which he was an assistant at the Budapest Technical University. He left because of his increasing interest in teaching, and taught at a secondary school from 1931 to 1940. He spent the year 1936/37 in Bologna associated with several Italian geometers. In 1939 he studied the Bolyai manuscripts in Marosvásárhely [now Tîrgu Mureş, Romania]. During World War II he was in military service and was a prisoner of war. After

his return to Budapest he had the title of a secondary school teacher but was assigned to the University of Budapest. In 1947 he became a professor at the Teacher's College. Habilitated in 1948 in the field of projective and descriptive geometry and organized the teaching of descriptive geometry at the University of Budapest. In 1952 he became Candidate and in 1968 Doctor of Mathematical Sciences. Areas of interest: projective and descriptive geometry, finite geometry, didactics.

KERÉKJÁRTÓ Béla (also de Kerékjártó) (Budapest, October 1, 1898 – Gyöngyös, May 26, 1946) attended the University of Budapest between 1916 and 1920. He obtained his Ph.D. in 1920 and became "Privatdozent" in analysis and geometry in 1922. In 1922/23 he was a visiting professor in Göttingen; his lectures there became his famous Yellow Springer book. Then he spent two years in Princeton. He was appointed extraordinary professor at the University of Szeged in 1925 and ordinary professor in 1929. Lectured in Barcelona and in Paris. In 1938 he was appointed professor at the University of Budapest. He was elected corresponding member of the Hungarian Academy of Sciences in 1934, ordinary member in 1945, and in 1936 corresponding member of the Société Royale des Sciences de Liège. Areas of interest: topology, geometric group theory, foundations of geometry.

KERTÉSZ Andor (Gyula, February 19, 1929 – Budapest, April 3, 1974) studied at the University of Debrecen in 1947–1952. He obtained his diploma as a mathematics-descriptive geometry teacher in 1952 and became a research student first of Tibor Szele, after whose death László Rédei directed his research. Was awarded the degree of Candidate in 1954 and Doctor of Mathematical Sciences in 1957. He taught at the University of Debrecen from 1950. He was a professor also at the University of Halle in 1962–64 and in 1968–71. The German Leopoldina Academy elected him a member. Areas of interest: rings, modules, abelian groups, set theory.

KIS Ottó (Budapest, May 22, 1931 – Budapest, April 26, 2001). He obtained his diploma of mathematics-physics teacher from the University of Budapest in 1952, and was a graduate student in Leningrad [now St. Petersburg] from 1952 to 1955 under the direction of V. I. Krylov. He obtained the degree of Candidate in 1955. Worked from 1955 to 1968 at the University of Budapest, then at the Budapest Technical University. Areas of interest: approximation, interpolation, numerical analysis.

KISS Péter (Nagyréd, March 5, 1937 – Eger, March 5, 2002). He studied at the University of Budapest. During 12 years he taught at a secondary

school, and in 1971 he was appointed to the Teacher's College in Eger. He became a Candidate in 1977 and habilitated at the Kossuth University of Debrecen in 1996. He obtained the title of Doctor of Mathematical Sciences in 1999, and in 1997 he received the Albert Szent-Györgyi Prize. Scientific interest: number theory.

KLUG Lipót (also Leopold) (Gyöngyös, January 23, 1854 – Budapest, 1944) studied at the Budapest Technical University from 1870 to 1874 and obtained a diploma for teaching mathematics and descriptive geometry. Between 1874 and 1893 he taught in Pozsony [now Bratislava, Slovakia], where he wrote his first books on geometry. In 1893/97 he was a teacher at a secondary school in Budapest and habilitated to "Privatdozent" at the University of Budapest. He started teaching descriptive geometry at the University of Kolozsvár in 1897, where he became a professor in 1900. After retirement he moved to Budapest. At the 50^{th} anniversary of the Loránd Eötvös Society he offered a year's retirement pay for a foundation to promote geometry in Hungary. The Klug Lipót Prize was awarded only once, in 1943. The recipients were László Fejes (Tóth) and Ferenc Zigány. The 90-year old professor living alone disappeared during the siege of Budapest. Areas of research: descriptive geometry, synthetic geometry.

KOSIK Pál (Dolné Zahorany [Hungarian name: Magyarhegymeg], Czechoslovakia [now Slovakia], April 16, 1931 – Budapest, October 4, 1985) lost his sight in the first year of his life and grew up in asylums, attending only two classes till 1941. Then, after the South of Slovakia was returned to Hungary, he got to Budapest, finished elementary school still in asylums, worked a year in handicraft, and then completed secondary school from 1949 to 1953. Studied at the University of Budapest from 1953 till 1958 and then got a position at the Mathematical Research Institute. Scientific interest: differential equations, numerical analysis.

KOVÁCS Béla (Kissikátor, September 25, 1946 – Debrecen, September 14, 2001). He obtained a mathematics diploma from the University of Debrecen in 1970. Between 1970 and 1972 he had a research grant; following that he worked at the University of Debrecen. He obtained a doctorate from this university in 1972. Scientific interests: number theory, group theory.

KŐNIG Dénes (Budapest, September 21, 1884 – Budapest, October 19, 1944). Son of Gyula Kőnig. Attended the Mintagimnázium in Budapest, where Manó Beke was his teacher. Wrote the first volume of his book on popular mathematics ("Mathematical Recreations") while he was still in school, and the second volume as a student. Won the Eötvös Competition

in 1902. He studied at the University of Budapest in 1902–04 and from 1904 spent five semesters in Göttingen. He obtained his Ph.D. in 1907 with a dissertation on geometry, and worked at the Technical University of Budapest until the end of his life. He was very active in the Mathematical-Physical Society, edited its Journal and judged the mathematical competition. In 1918 he and his brother established the Gyula Kőnig Prize for mathematics to commemorate their father. Specialities: graph theory, topology.

KŐNIG Gyula (also Julius) (Győr, December 16, 1849 – Budapest, April 8, 1913). He attended the Benedictine Gimnázium in Győr, and even before obtaining his "matura" he studied at the medical faculty in Vienna. He studied mathematics in Budapest and then in Heidelberg, Germany, where in 1870 he obtained his Ph.D. with a dissertation on elliptic functions. He spent a year in Berlin, where Kronecker had a great influence on him. He returned to Hungary and became a "Privatdozent" in 1871, professor at the Technical University from 1874 to 1905. His seminar with Kürschák was the center of mathematical life in Budapest. Was also active in the development of secondary schools and the preparation of teachers. He was one of the founders of the Mathematical-Physical Society and its honorary vice-president. Mathematical interests: algebra, number theory, logic, set theory.

KÜRSCHÁK József (also Josef) (Buda, March 14, 1864 – Budapest, March 26, 1933). He entered in 1881 the Teacher's College of the Budapest Technical University. He started research in mathematics under the influence of Gyula Kőnig, wrote his first paper on the polygons inscribed in and circumscribed about a circle while still a student. He taught at various schools before getting his diploma in 1888. He obtained his Ph.D. in 1890 with a dissertation on the calculus of variations, and then taught at the Technical University. He became corresponding member of the Hungarian Academy of Sciences in 1896, ordinary member in 1914. He was very active in the Mathematical and Physical Society, and published a collection of problems given at the Eötvös Competition. The mathematical competition organized by the Bolyai Society for high school students, the successor of the Eötvös Competition, is named after him. Areas of interest: geometry, number theory, algebra, calculus of variations, partial differential equations. He introduced the abstract notion of valuation of fields.

LAKATOS Imre (Debrecen, November 9, 1922 – London, February 2, 1974) studied mathematics, physics and philosophy at the University of Debrecen from 1941 to 1944. In 1945/46 he was a student at the Eötvös

Collegium in Budapest and at the same time an assistant of Ottó Varga at the University of Debrecen. He obtained his Ph.D. in Debrecen in 1947 with a thesis in in epistemology. Having joined the illegal Communist Party during the War, he became politically very active in 1945, participated in the destruction of the Eötvös Collegium, and as a recompense was sent to Moscow as a research student in theoretical physics. In 1950 he was expelled from the Party, arrested, and sent to a concentration camp. Freed in 1953, he joined (with the help of Alfréd Rényi) the Mathematical Research Institute, where he translated Pólya's book "How to Solve it". After the Revolution in 1956 he escaped and went with a Rockefeller fellowship to Cambridge, England. There he earned another Ph.D. with a dissertation which became his most famous book "Proofs and Refutations". He became the successor of Karl Popper at the London School of Economics. Area of research: philosophy of science, in particular of mathematics.

LÁNCZOS Kornél (also Cornelius) (Székesfehérvár, February 2, 1893 – Budapest, June 25, 1974) studied mathematics, physics and philosophy at the University of Budapest, and obtained his diploma in 1916. Between 1916 and 1920 he was an assistant at the physics department of the Technical University. He took a Ph.D. in 1921. In 1920 he left for Germany. Until 1924 he was an assistant in Freiburg, from 1924 to 1928 in Frankfurt, in 1928/29 in Berlin and then again in Frankfurt until 1931. Between 1931 and 1952 he lived in the USA. He was an engineer at the Boeing company. From 1949 to 1952 he worked at the Numerical Analysis Institute in Los Angeles. In 1952 he moved to Ireland. He was a visiting professor at Dublin University until 1954, when he became a member of the Dublin Institute for Advanced Studies and remained there until his retirement in 1968. He was awarded the Chauvenet Prize, was a member of the Royal Society of Ireland, and had several honorary doctorates. Areas of interest: relativity, quantum mechanics, integral equations, functional analysis, numerical methods.

LAX Péter (Budapest, May 1, 1926 –) was a pupil at the Minta-gimnázium in Budapest. As a child prodigy he was tutored by Rózsa Péter. The family left Budapest for New York in November of 1941. He studied at New York University from 1944 and obtained his Ph.D. there in 1949. Worked in the Manhattan Project at the Los Alamos Laboratory in 1945/46, where he first came into contact with John von Neumann and with computers, and also from 1950 to 1958. From 1949 he was also a faculty member of New York University, Director of the AEC Computing and Applied Mathematics Center from 1964 to 1972, Director of the Courant Institute of Mathematical Sciences from 1972 to 1980, then Director of the

Courant Mathematics and Computing Laboratory. He was president of the American Mathematical Society in 1979/80. He is a member of the National Academy of Sciences of the USA, Foreign Associate of the French Academy of Sciences, of the Russian Academy of Science, honorary member of the Hungarian Academy of Sciences (1993), etc. Honorary doctor of the University of Paris VI. Recipient of the Chauvenet Prize (1974), the Norbert Wiener Prize (1975), the National Medal of Science (1986), the Wolf Prize (1987), the Steele Prize (1992), the Abel Prize (2005). Mathematical interests: nonlinear partial differential equations, shock waves, scattering theory, numerical mathematics.

LÁZÁR Dezső (Erzsébetfalva [later: Pestszenterzsébet, now part of Budapest], March 14, 1913 – Ukraine, 1943) graduated from the University of Szeged, in 1941 became a secondary school teacher. Died in the war. Area of interest: set theory.

LENGYEL Béla (Budapest, October 5, 1910 – Irvine, California, USA, November 1, 2002) studied at the University of Budapest from 1927 to 1933 and obtained his mathematics-physics teacher's diploma in 1933. Became an assistant of Kürschák at the Technical University but also performed experiments in the Department of Physics. He obtained his Ph.D. in 1934 with a dissertation on operator theory. Worked in insurance. Spent the year 1935/36 with a fellowship at Harvard University where he associated with M. H. Stone. He returned to Hungary but emigrated in 1939 to the USA where he taught at the Rensselaer Polytechnic Institute (Troy, New York) and at Brown University, physics at the City College of New York. He was appointed professor of physics in 1943 at the University of Rochester. From 1946 he had a position at the Naval Research Laboratory, and from 1950 he was an advisor of the Office of Naval Research. He moved to California in 1952, where he worked during eleven years at the Hughes Research Laboratories. Scientific interests: operators in Hilbert space, interpolation, statistics, lasers.

LIPKA István (also Stephan) (Budapest, May 9, 1899 – Budapest, September 24, 1990) entered the University of Budapest as a regular student in mathematics and physics, but attended also the Technical University. He obtained his teacher's diploma and his Ph.D. in mathematics in 1923, then taught at a secondary school until 1926. Became an assistant of Béla Kerékjártó in Szeged, spent a semester in Hamburg in 1929, became "Privatdozent" in 1933 and obtained the Gyula Kőnig Prize in 1938 for his work in algebra. From 1942 to 1945 he was a docent at the University of

Szeged. He was sent into retirement in 1946, then obtained positions in industry. In 1954 he obtained the title of Doctor of Technical Sciences. Areas of scientific interest: before 1945: algebra, the geometry of polynomials, complex function theory; after 1945: technical mathematics.

LUKÁCS Ferenc (Budapest, June 27, 1891 – Budapest, November 30, 1918). In secondary school, Frigyes Riesz was his teacher for a short time, who noticed his talent. Won second prize at the Eötvös Competition in 1909. He studied at the University of Budapest. After obtaining his Ph.D., he became an assistant of József Kürschák at the Technical University, and married Tekla Téri in 1914. His wife was not a mathematician but discovered a nice geometric theorem (see [129] I, Sec 3, No. 111). Areas of scientific interest: power series, Fourier series, polynomials.

MAKAI Endre (Budapest, November 5, 1915 – Budapest, November 8, 1987) won the Eötvös competition in 1933. He studied at the University of Budapest while a member of the Eötvös Collegium. Wrote his first paper while still a student, obtained his diploma in 1938, was unemployed until 1942, when he got a job at the Chinoin Chemical Factory. Received a Ph.D. in 1942. After World War II he worked at the research laboratory of the Tungsram company. In 1951 he got a position at the mathematics department of the College of Mechanical Engineering of the Technical University, moved in 1961 to the Mathematical Research Institute. He became Doctor of Mathematical Sciences in 1955, was awarded the Prize of the Academy in 1970 and the State Prize in 1973. Research interests: differential equations, special functions, vibration of membranes.

MEDGYESSY Pál (Egercsehi, October 10, 1919 – Budapest, October 8, 1977) studied at the University of Budapest while a member of the Eötvös Collegium. Then he got a position at the Institute for Physics of the Medical College of Debrecen University. Starting with 1955 he worked at the Mathematical Research Institute in Budapest. He obtained the degree of Candidate in 1955 and Doctor of Mathematical Sciences in 1973. Areas of interest: probability theory, statistics, and their applications.

MIKOLÁS Miklós (Celldömölk, April 5, 1923 – Budapest, February 2, 2001) entered the University of Budapest and the Eötvös Collegium in 1942, obtained his teacher's diploma in 1947, and his Ph.D. in 1948. He was an assistant of Lipót Fejér and then a docent at the University of Budapest until 1964. He obtained the degree of Candidate in 1955 and Doctor of Mathematical Sciences in 1992. From 1964 he was a professor at the Technical University. Areas of interest: analytic number theory,

summability methods, orthogonal polynomials, fractional calculus, applied statistics, and applications of mathematics to technical problems.

MOGYORÓDI József (Nagyoroszi, October 2, 1933 – Budapest, March 27, 1990) studied from 1952 to 1957 at the University of Budapest, where he obtained a mathematics diploma in 1957. Starting with 1958 he taught at the University of Budapest and, from 1971, also at the University of Debrecen. Became Candidate in 1967, and Doctor of Mathematical Sciences in 1980. Areas of interest: probability, statistics, applications, computer science.

MOLNÁR Ferenc (1933 – Budapest, January 18, 1962) attended the University of Budapest from 1950 to 1954, and after receiving his diploma became an assistant of György Hajós in the Department of Geometry. Field of interest: geometry.

MOÓR Arthur (Budapest, January 8, 1923 – Sopron, August 26, 1985) started his university studies in Szeged in 1941 but because of the war graduated only in 1947. He was a member of the Eötvös Collegium, where László Kalmár was one of his teachers. From 1947 to 1950 he taught at the Teacher's College in Szarvas. His first works on Finsler geometry caught the attention of Ottó Varga, with whose help he transferred to a secondary school in Debrecen, where he taught from 1950 to 1952. In 1953 he became a research student under the direction of Varga and obtained the degree of Candidate in 1956. From 1956 to 1968 he worked at the University of Szeged and obtained the degree of Doctor of Mathematical Sciences in 1964. Moved to the University of Forestry in Sopron in 1968. Area of interest: differential geometry, mainly Finsler geometry.

NEUMANN János (also John von Neumann) (Budapest, December 28, 1903 – Washington, DC, USA, February 8, 1957). One of the most brilliant minds of the twentieth century. Attended the Lutheran Evangelical Gimnázium in Budapest, where László Rátz was his teacher, Jenő Wigner his friend. As a child prodigy, he was mentored by József Kürschák, Mihály Fekete, and Gábor Szegő. In 1921 he registered simultaneously at two universities: in Budapest for mathematics, and in Berlin, later Zurich for chemical engineering. He returned to Budapest at the end of each semester to pass the examinations and received his Ph.D. in mathematics in 1926. Spent one year in Göttingen, became "Privatdozent" in 1927 in Berlin and in 1929 in Hamburg. In 1930 he went to Princeton University as a guest professor and later as a professor, and from 1933 was a member of the Institute for Advanced Study. Between 1943 and 1955 he was a consultant of the Los

Alamos laboratory and in 1955 was appointed member of the Atomic Energy Commission. He was president of the American Mathematical Society from 1951 to 1953. He was member of seven academies, had honorary Doctor's degrees from seven universities and was awarded the following distinctions: Bôcher Prize (1937), Medal of Merit, Civilian Service Award, U.S. Navy (1947), Medal of Freedom (1956), Albert Einstein Commemorative Medal (1956), Enrico Fermi Award (1956). Areas of interest: logic, set theory, operator theory, measure theory, ergodic theory, game theory, computer science, quantum mechanics, applied mathematics.

OBLATH Richárd (Versec [now Vršac, Serbia], June 11, 1882 – Budapest, June 18, 1959) studied at the University of Budapest and obtained his mathematics-physics teacher's diploma in 1905. Taught at secondary schools in several towns between 1905 and 1919. After the fall of the Soviet Republic he lost his job. Worked first in insurance and from 1922 to 1945 as a mathematician of the General Mining Company. From 1946 he was a lecturer at the University of Budapest. In 1955 he obtained the title of Candidate. He was active in the organization of the Bolyai Society and gave lectures popularizing mathematics. Areas of interest: elementary number theory, actuarial mathematics, history of mathematics.

OLÁH Gyula (Kiskunfélegyháza, August 16, 1931 – Budapest, April 28, 1983) began his studies in mathematics-physics at the University of Budapest in 1949. After obtaining his diploma in 1953 he got a position at the same university. Between 1960 and 1965 he worked at the Mathematical Research Institute. He obtained the title of Candidate in 1971. From 1965 to 1973 he worked at the Ministry of Education, from 1973 at the Budapest Technical University. Areas of interest: graph theory. Later, his daughter Vera was the editor of KöMaL for several years.

PÁL Gyula (also Julius) (Győr, June 27, 1881 – Copenhagen, Denmark, September 6, 1946). He attended the University of Budapest, obtained his diploma in 1908 and taught until 1918 at a secondary school. In 1916 he received a Ph.D. at the University of Kolozsvár. In 1919 he moved to Copenhagen and started teaching at the Sankt Jørgens Gymnasium, where Børge Jessen was his student. From 1925 he taught at the Polytechnic School, between 1932 and 1938 also at the University of Copenhagen. Areas of interest: approximation, plane topology, Kakeya's needle problem.

PÁL László György (Nagyszénás, April 5, 1929 – Budapest, May 15, 2001) studied at the University of Budapest from 1947 to 1951 and was

a member of the Eötvös Collegium. After graduating he worked at the same university till his retirement in 1996, with the exception of the period 1972–76 when he taught at the University of Lagos, Nigeria. He became a Candidate in 1967, Doctor of Mathematical Sciences in 1995. Scientific interest: orthogonal series, interpolation theory.

PAPP Zoltán (Debrecen, May 31, 1951 – Budapest, November 19, 1991) studied mathematics at the University of Debrecen. He worked at the Research Institute of the Postal Service, where he developed algorithms for the planning of optimal communication networks. Field of research: diophantine number theory.

PÉTER Rózsa (Budapest, February 17, 1905 – Budapest, February 16, 1977) started studying chemistry at the University of Budapest but soon switched to mathematics, where László Kalmár had a great influence on her. Her first paper, written while she was still a student, was on number theory, but she became interested very early in recursive functions. She earned her diploma in 1927, but obtained a teaching position only in 1933, and she had it until 1939. She received her Ph.D. in 1937. In 1945 she was appointed a secondary school teacher, then became a professor at the Teacher's College. Between 1955 and 1975 she was a professor at the University of Budapest. She was awarded the degree of Doctor of Mathematical Sciences in 1952 and was elected corresponding member of the Hungarian Academy of Sciences in 1973. She was awarded the Kossuth Prize (1951), the Beke Manó Prize (1953), the State Prize (1970). Areas of interest: recursive functions, computer science, mathematical linguistics, popularization of mathematics and mathematical education.

POLLÁK György (Budapest, April 26, 1929 – Pécs, June 29, 2001), winner of the Kürschák competition in 1947, started his university studies in Budapest in 1947 but between 1948 and 1953 he studied at the University of Kazan (Russia). He got a position first at the Bolyai Institute of the University of Szeged in 1953/54, from 1958 at the Szeged Department of the Mathematical Research Institute. He obtained the title of Candidate in 1961. Field of research: algebra, mainly semigroups.

PÓLYA György (also George) (Budapest, December 13, 1887 – Palo Alto, California, USA, July 7, 1985) started studies in Budapest, first law, literature, philosophy, and then switched to physics and mathematics. He spent the years 1910-1914 mostly in Vienna, Göttingen and Paris, obtained his Ph.D. in Budapest in 1912. He worked at the Federal Polytechnic School in Zurich from 1914 to 1940. His famous collection of problems in analysis

written jointly with Gábor Szegő appeared in 1925. In 1940 he left for the United States. After two years at Brown University he became a professor at Stanford, becoming emeritus in 1953. Was a member of the National Academy of Science of the USA, of the Hungarian Academy of Sciences and other Academies, was awarded four honorary doctorates. Both the Mathematical Association of America and the Society for Industrial and Applied Mathematics have prizes named after him. Areas of interest: complex function theory, probability, combinatorics, number theory, psychology of mathematical discovery.

PUKÁNSZKY Lajos (Budapest, November 4, 1928 – Philadelphia, Pennsylvania, USA, February 19, 1996) studied at the University of Debrecen in 1947/51, then he was attached to the Mathematical Research Institute in Budapest although he worked in Szeged from 1952. He obtained the degree of Candidate in 1955. He left Hungary in January 1957 and went to the USA. He first obtained a fellowship in Chicago, then spent three years at the Research Institute for Applied Science in Baltimore. In 1960/64 he was at the University of Maryland, College Park. In 1963 he was appointed to the University of California in Los Angeles but spent 1964/65 at the University of Paris, France. In 1965 he was offered a professorship at the University of Pennsylvania, from where he retired in 1994. Areas of interest: operator algebras, in particular von Neumann algebras and quasi-unitary algebras, representations of Lie groups, in particular exponential and solvable Lie groups.

RADÓ Ferenc (also Francisc, François) (Timişoară, Romania, May 21, 1921 – Cluj-Napoca, Romania, November 27, 1990) started studies at the Technical University in Bucharest. In 1940/44 he did labor service in the Hungarian Army. From 1944 to 1946 he studied at the University of Kolozsvár. Between 1946 and 1949 he taught at a secondary school, but was also appointed to the Pedagogical Institute in Timişoară. From 1950 until his retirement in 1985 he taught at the Bolyai University and the Babeş–Bolyai University of Kolozsvár. He obtained his Ph.D. in 1959. He was an advisor of the Computing Institute of the Romanian Academy of Sciences. He spent the year 1969/70 as a visiting professor at the University of Waterloo, Canada. Fields of interest: functional equations, nomograms, algebraic foundations of geometry. He wrote a number of didactical works in Romanian and in Hungarian.

RADÓ Tibor (Budapest, June 2, 1895 – New Smyrna Beach, Florida, USA, December 25, 1965) won the Eötvös Competition in 1913. Started

his studies at the Budapest Technical University but soon switched to the University of Budapest. During World War I he fought on the Russian front, fell into captivity and spent several years in Siberia. He escaped and returned to Hungary through China and India. Continued his studies in 1921 at the University of Szeged, where he obtained his Ph.D. and became an assistant of Frigyes Riesz and Alfréd Haar. In 1928 he went to Munich with a Rockefeller Fellowship and in 1929 emigrated to the USA. First he taught in Houston, but from 1930 until his retirement in 1948 he was a professor at the Ohio State University in Columbus. Afterwards, he worked a few more years at the University of Chicago. Areas of interest: Riemann surfaces, surface area, Plateau's problem, subharmonic functions.

RADOS Gusztáv (also Gustav) (Pest, February 22, 1862 – Budapest, November 1, 1942) studied at both the University and the Technical University in Budapest (1879–1883). In 1882 he published his first article on higher congruences. Spent the year 1884/85 with Felix Klein in Leipzig. From 1885 he had a position at the Budapest Technical University. Became corresponding member of the Hungarian Academy of Sciences in 1894, and ordinary member in 1907. He was awarded the Great Prize of the Academy in 1936 and the University of Kolozsvár awarded him an honorary doctorate. He was a founding member of the Mathematical and Physical Society, its Vice-President in 1913, its President in 1933. Areas of interest: algebra, in particular linear algebra, number theory, differential geometry.

RADOS Ignác (Pest, May 15, 1859 – 1944). Brother of Rados Gusztáv. He studied at the University of Budapest and the Budapest Technical University, and obtained his mathematics-physics teacher's diploma in 1883. Taught first at the Commercial Academy of Budapest, and then at secondary schools in Székelyudvarhely [now Odorhei, Romania] and Budapest. He published a number of articles on the work of great mathematicians. Translated the "Appendix" of János Bolyai and the book of Paul Stäckel on the Bolyais into Hungarian. Main interest: history of mathematics.

RAPCSÁK András (Hódmezővásárhely, December 12, 1914 – Debrecen, October 16, 1993) was admitted to the University of Szeged and the Eötvös Collegium in 1933. Because of health problems he had to interrupt his studies and obtained his diploma in 1942. Taught at secondary schools in several towns. Became interested in differential geometry under the influence of Ottó Varga, and starting with 1945 also lectured at the University of Debrecen. He obtained his Ph.D. in 1947. He also taught at the Teacher's

College in Debrecen, and starting in 1949/51 at the similar College in Eger. In 1951 he returned to the University of Debrecen. He became a Candidate in 1955, Doctor of Mathematical Sciences in 1960, corresponding member of the Hungarian Academy of Sciences in 1967, ordinary member in 1982. Research interest: differential geometry, mainly Finsler spaces.

RÁTZ László (Sopron, April 9, 1863 – Budapest, September 30, 1939) attended the University of Budapest, where he obtained his teacher's diploma, after which he studied in Strassburg and in Berlin. In 1890 he became a teacher at the Lutheran Evangelical Gimnázium in Budapest and taught there for 35 years. Among his students were Alfréd Haar, John von Neumann, Jenő Wigner, and János Harsányi. Between 1896 and 1914 he edited the Mathematical Journal for Secondary Schools (KöMaL). The Bolyai János Mathematical Society named after him a yearly meeting for mathematics teachers.

RÉDEI László (also Ladislaus) (Rákoskeresztúr [now part of Budapest], November 15, 1900 – Budapest, November 21, 1980) won second prize at the Eötvös Competition in 1918. Studied at the University of Budapest and obtained his diploma as a mathematics-physics teacher and also his Ph.D. in 1922. He taught at secondary schools in several towns. He habilitated at the University of Debrecen in 1932, spent the year 1934/35 in Göttingen and was awarded the Gyula Kőnig Prize in 1940. In 1940 he was offered a position at the University of Szeged. From 1967 to 1971 he worked at the Mathematical Research Institute in Budapest. He was elected corresponding member of the Hungarian Academy of Sciences in 1949, ordinary member in 1955, member of the German Leopoldina Academy in 1962, and was awarded the Kossuth Prize in 1950 and in 1955, an honorary doctorate from the Szeged University in 1971. He was awarded the Tibor Szele Medal in 1973. Areas of interest: algebraic number theory, algebra, geometry.

RÉNYI Alfréd (Budapest, March 20, 1921 – Budapest, February 1, 1970) attended the University of Budapest, and obtained his Ph.D. in 1945 in Szeged. In 1946/47 he was a research student in Leningrad [now St. Petersburg] under the direction of Yu. V. Linnik. Habilitated at the University of Budapest in 1947. He was appointed professor at the University of Debrecen in 1949, where with Ottó Varga he founded the journal Publicationes Mathematicae. In 1950 he became founding director of the Applied Mathematics Institute of the Hungarian Academy of Sciences, later Mathematical Research Institute, which now bears his name. From 1952 he also had a position at the University of Budapest. Elected corresponding member of

the Hungarian Academy of Sciences in 1949, ordinary member in 1956. He received the Kossuth Prize in 1949 and in 1954. Areas of interest: number theory, probability and its applications, statistics, information theory, complex variables, combinatorics, popularization of mathematics.

RÉNYI Kató (also Catherine) (Budapest, October 24, 1924 – Budapest, August 31, 1969), wife of Alfréd Rényi. Started university studies in Budapest in 1942, continued in Szeged in 1945, then in Leningrad in 1946/47, and graduated in Budapest in 1949. Starting with 1950 she taught at the University of Budapest. She was an excellent teacher. Field of research: complex function theory. The Bolyai Society named after her a prize given for scientific achievements obtained by students before taking their Master's degree.

RÉTHY Mór (Nagykőrös, November 3, 1848 – Budapest, October 16, 1929) studied at the Technical Universities of Buda and Vienna. After obtaining his engineer's diploma he was an assistant at the Budapest Technical University, then a secondary school teacher. He studied in Heidelberg and also in Göttingen, where his first article, on the refraction of light, was presented. From 1874 to 1876 he was professor of theoretical physics and mathematics at the University of Kolozsvár [now Cluj-Napoca, Romania], and from 1886 at the Budapest Technical University. He was elected corresponding member of the Hungarian Academy of Sciences in 1878, and ordinary member in 1900. Research areas: work of Bolyai, complex function theory, mathematical physics.

RÉVÉSZ Gábor (Budapest, May 31, 1954 – Budapest, June 26, 1997) studied economics in Budapest and London, and graduated from the London School of Economics in 1978. Then he became a Ph.D. student with P. M. Cohn and took his degree in 1981. In 1981–84 he had research fellowships in London and Berlin, from 1984–87 a position at the University of Kansas at Lawrence, USA. Then he returned to Hungary, and was at the Technical University for Heavy Industry in Miskolc. In 1995 he gave up his position at the university for financial reasons, and took up work in economics. Field of research: algebra, mainly ring theory.

RIESZ Frigyes (also Frederic) (Győr, January 22, 1880 – Budapest, February 28, 1956) started studying engineering at the Eidgenössische Technische Hochshule in Zurich but after a couple of years returned to the University of Budapest to study mathematics and physics. He obtained his teacher's certificate and his Ph.D. in 1902. He was appointed teacher in Lőcse [now Levoča, Slovakia] in 1904 and in Budapest in 1908, but spent

most of his time in Göttingen and in Paris with scholarships. In 1912 he was appointed professor at the University of Kolozsvár. In 1920 he was, with Alfréd Haar, one of the founders of the Mathematical Institute of the new University of Szeged. They were also the founders of the Acta Scientiarum Mathematicarum, journal of this Institute. In 1946 he moved to the University of Budapest. He was elected corresponding member of the Hungarian Academy of Sciences in 1916, and ordinary member in 1936. He was a corresponding member of the French Academy of Sciences (1948), of the Bavarian Academy and of the Royal Physiographical Society of Lund. He was awarded the Great Prize of the Hungarian Academy in 1945, and the Kossuth Prize in 1949 and l953. He received honorary doctorates from the University of Szeged (1946), the University of Budapest (1950) and the University of Paris (l954). Areas of interest: integral equations, functional analysis (of which he was one of the creators), complex analysis, subharmonic functions (which were also his creation), ergodic theory.

RIESZ Marcel (Győr, November 16, 1886 – Lund, Sweden, September 4, 1969), brother of Frigyes Riesz. He won the Eötvös Competition in 1904, then studied at the University of Budapest and was a member of the Eötvös Collegium. He received his Ph.D. in 1909. Spent the academic years 1906/07 and 1909/10 in Göttingen, 1910/11 in Paris, where he got an invitation from Gösta Mittag-Leffler to give three lectures in Sweden. He accepted, and stayed in Sweden for the rest of his career. He was first at the University of Stockholm, and from 1926 until his retirement in 1952 at the University of Lund. He spent the year 1947/48 at the University of Chicago and after retirement until 1960 he was a visitor at Princeton University, the Courant Institute, Stanford University, the University of Maryland and Indiana University. He was a member of the Swedish Academy and an honorary doctor of the University of Copenhagen. Areas of interest: trigonometric series, complex function theory, in particular Dirichlet series, the moment problem, partial differential equations, relativistic quantum theory, algebra, number theory.

SALLAY Melánia (Kispest [now part of Budapest], June 7, 1934 – Budapest, September 10, 1981). She studied at the University of Budapest and obtained her mathematics-physics teacher's diploma in 1956. From the same year she had a position at the Mathematical Research Institute. Field of research: approximation and interpolation theory.

SARKADI Károly (Budapest, September 12, 1914 – Budapest, August 19, 1985) obtained his mathematics-physics teacher's diploma from

the University of Budapest in 1937. Between 1937 and 1947 he did military service, taught at a secondary school, was sent to the front line, and fell into captivity. From 1947 to 1952 he was again a secondary school teacher. From 1952 on he worked at the Mathematical Research Institute. He obtained the degree of Candidate in 1958, Doctor of Mathematical Sciences in 1976. In 1976 he was at the University of California in Berkeley with a Ford Fellowship. In 1966 he obtained the State Prize. Field of interest: statistics.

SCHLESINGER Lajos (also Ludwig) (Nagyszombat [now Trnava, Slovakia], November 1, 1864 – Gießen, December 16, 1933) started his university studies in Heidelberg and continued in Berlin, where he obtained his Ph.D. in 1887 and habilitated in 1889. In 1897 he was extraordinary professor of the University of Bonn, and the same year became ordinary professor at the University of Kolozsvár [now Cluj-Napoca, Romania]. In 1911 he got a call from Budapest, but he went to Gießen, from where he retired in 1930. He was the son-in-law of Lazarus Fuchs. The Hungarian Academy of Sciences elected him corresponding member in 1902. Areas of interest: differential equations, automorphic functions.

SCHOPP János (1910 – Budapest, October 25, 1980). He obtained a teacher's diploma from the University of Budapest in 1934; he was also a member of the Eötvös Collegium. He worked as an actuary until 1948, taught at a secondary school until 1951, and then at the Budapest Technical University. Area of scientific interest: geometry.

SCHWEITZER Miklós (Budapest, February 1, 1923 – Budapest, January 28, 1945) obtained second prize at the Eötvös Competition in 1941. He was not admitted to the University, nevertheless learned mathematics and obtained his first result in 1942. His manuscripts were published posthumously by Pál Turán. Since 1949 the Bolyai János Mathematical Society has an annual competition for university students named after Schweitzer. Area of interest: infinite series and products.

SERES Iván (Budapest, December 15, 1907 – Budapest, February 25, 1966) studied in Budapest and obtained his mathematics-physics teacher's diploma in 1930. Until 1944 tutored, was assistant editor of KöMaL and worked in insurance. After 1945 he taught until 1949 at secondary schools. In 1949/51 he worked at the National Library and in 1951/52 in industry. From 1952 he had a position at the Mathematical Research Institute. He obtained the degree of Candidate in 1955. Area of research: irreducibility of polynomials.

SIDON Simon, see Szidon Simon.

SÓLYI Antal (1912 or 1913 – 1946). He studied at the University of Szeged, where he obtained his Ph.D. in 1941 with a dissertation on Haar's variational lemma and its applications.

SOMORJAI Gábor (Budapest, October 23, 1951 – Budapest, January 15, 1978) attended the University of Budapest, obtained his diploma in 1975 and got a position at the Mathematical Research Institute. Areas of interest: approximation, complex function theory.

SONNEVEND György (Szombathely, March 31, 1944 – Budapest, April 9, 1996) studied mathematics at the University of Budapest from 1962 to 1967 and then got a position at the Institute for Computation of the Hungarian Academy of Sciences. From 1969 he spent three years with L. S. Pontryagin at the Steklov Institute in Moscow, and there he obtained the degree of Candidate in 1973. From 1976 on he was at the University of Budapest but spent the period 1987–1992 at the University of Würzburg, Germany. In 1995 he obtained the title Doctor of Mathematical Sciences. Research interest: optimal control, numerical analysis.

STEINFELD Ottó (Szarvas, March 5, 1924 – Budapest, July 8, 1990). After secondary school he was not allowed to university studies, so he worked as a bricklayer. Then he was drafted for labor service, where his health was ruined. In 1945/50 he studied mathematics and physics at the University of Szeged, and after receiving his diploma, he got a position there. Became Candidate in 1955, then moved to Budapest, where he worked at the Mathematical Research Institute. He obtained the title of Doctor of Mathematical Sciences in 1969. Area of research: algebra, mainly semigroups and ordered algebraic structures.

SURÁNYI János (Budapest, May 19, 1918 –) studied at the University of Szeged from 1937 to 1941, was drafted for labor service from 1942 to 1945. He spent the years 1945/48 at the University of Szeged, where with Paula Soós he restarted the KöMaL. Between 1948 and 1951 he worked at the Ministry of Education and the National Institute for Pedagogy. From 1951 to 1988 he was a professor of the University of Budapest. In 1970/71 he was visiting professor at Sherbrook University, Canada. He became Candidate in 1953, Doctor of Mathematical Sciences in 1957. Received the Beke Manó Prize in 1952. For several decades, he was the head of the committee organizing the Kürschák competition. Areas of interest: logic, number theory, combinatorics, didactics of mathematics, competitions.

SUTÁK József (Szabadka [now Subotica, Serbia], November 5, 1865 – Budapest, July 19, 1954). He was a member of the Piarist order. Studied theology in Nyitra [now Nitra, Slovakia]. After obtaining his teacher's diploma he taught at the Piarist Gimnáziums first in Szeged, then in Budapest. He obtained his Ph.D. from the University of Budapest in 1892, habilitated in 1896, and translated the "Appendix" of János Bolyai in 1897. He was professor of higher geometry at the University of Budapest from 1912 to 1936. Areas of research: geometry, analysis and physics.

SZ.-NAGY Béla, see Szőkefalvi-Nagy Béla.

SZ.-NAGY Gyula, see Szőkefalvi-Nagy Gyula.

SZÁSZ Ferenc Andor (Kisújszállás, December 16, 1931 – Budapest, May 11, 1989). From 1950 to 1954 he studied at the University of Debrecen, and in 1954/55 was assistant of Tibor Szele there. After the death of Szele he taught at a secondary school and then got a research scholarship. From 1960 he worked at the Mathematical Research Institute in Budapest. He became Candidate in 1960, Doctor of Mathematical Sciences in 1973. Field of research: ring theory.

SZÁSZ Ottó (Alsószúcs [now Dolna Suča, Slovakia], December 11, 1884 – Montreux, Switzerland, September 19, 1952). Between 1903 and 1907 he studied at the University of Budapest and at the Budapest Technical University, then in Göttingen. He obtained his Ph.D. in Budapest in 1911, and continued his studies in Paris, Munich and Göttingen. Habilitated in 1914 in Frankfurt, in 1917 in Budapest. Taught at the University of Frankfurt from 1914 to l933. He was awarded the Gyula Kőnig Prize in 1930. In 1933 he emigrated to the USA. He first taught at the Massachusetts Institute of Technology, then in 1933/35 at Brown University, and beginning with 1936 at the University of Cincinnati. He spent a year at the Institute of Numerical Analysis in Los Angeles. Areas of research: infinite determinants, continued fractions, trigonometric polynomials, series and summation, special functions.

SZÁSZ Pál (also Paul) (Budapest, July 11, 1901 – Budapest, February 12, 1978) studied in Budapest, obtained his mathematics-physics teacher's diploma in 1924, then became the assistant of Lipót Fejér. He obtained his Ph.D. in 1927, spent the year 1928/29 in Berlin at the Humboldt University, and in 1933 habilitated in Budapest. In 1957 he was awarded the title of Doctor of Mathematical Sciences. He had positions at the University of Budapest and at the Teacher's College in Budapest. He was an excellent

teacher, lectured instead of Fejér Lipót on Differential and Integral Calculus and other topics in analysis at the University of Budapest. His more than 1300-page book "Elements of Differential and Integral Calculus" is not only a very successful textbook but also a true handbook in Analysis. Areas of research: Fourier series, interpolation, non-euclidean geometry.

SZEGŐ Gábor (also Gabriel) (Kunhegyes, January 20, 1895 – Palo Alto, California, USA, August 7, 1985) won the Eötvös Competition in 1912. He studied at the University of Budapest and was a member of the Eötvös Collegium. He spent the summers of 1913 and 1914 in Berlin and Göttingen. From 1915 to 1918 he was in military service. In Vienna at the air force he met von Kármán and von Mises, and obtained his Ph.D. in 1918. In 1919/20 he was an assistant of József Kürschák at the Budapest Technical University. In 1920 he moved to Berlin, where he first worked in a bank and as an editor of the Fortschritte der Mathematik. He habilitated at the University of Berlin in 1921, obtained the Gyula Kőnig Prize in 1924. In 1926 he was appointed professor at the University of Königsberg [now Kaliningrad, Russia] from where he emigrated to the USA in 1934. He first taught at Washington University in St. Louis and in 1938 went to Stanford, from where he retired in 1960. He was elected corresponding member of the Austrian Academy of Sciences in 1960, honorary member of the Hungarian Academy of Sciences in 1965. He was a member of the National Academy of Science of the USA. Areas of interest: classical analysis, Toeplitz determinants, orthogonal polynomials, mathematical physics.

SZEKERES György (also George) (Budapest, May 29, 1911 – Adelaide, Australia, 28 August, 2005) studied chemical engineering at the Budapest Technical University (1928–1932) but belonged to the group of friends of Pál Erdős, with whom he collaborated and published mathematics. One member of this group, Eszter Klein, became his wife. Until 1939 he worked in a leather factory and in 1939 he emigrated to Shanghai, where he started research in group theory. In 1948 he received an offer from the University of Adelaide (Australia), where he stayed until 1963. Then he became a professor of mathematics at the University of New South Wales (Sydney), where he got an honorary Ph.D. in 1976. He is a founding member of the Australian Mathematical Society, its president in 1972/74, a member the Australian Academy of Science (1963), recipient of the Lyle medal (1968), honorary member of the Hungarian Academy of Sciences (1986). He initiated mathematical competitions in Australia. Areas of research: combinatorics, number theory, group theory, diophantine approximations, general relativity.

SZELE Tibor (Debrecen, June 21, 1918 – Szeged, April 5, 1955) won the Eötvös Competition in 1936. He started to study mechanical engineering in Budapest but after one semester he switched to study mathematics and physics at the University of Debrecen. He obtained his diploma in 1941 and got a position at the Institute for Theoretical Physics in Szeged. He wrote his Ph.D. dissertation under the influence of László Rédei but because of military service defended it only in 1946. From 1946 to 1948 he was an assistant at the University of Szeged. In 1948 he returned to Debrecen and habilitated in algebra and combinatorics. In 1952 he was awarded the Kossuth Prize and got the title of Doctor of Mathematical Sciences. He inspired a large school of students to do research in algebra. The Bolyai Society named after him a prize given to those who created a mathematical school. Areas of interest: abelian groups, rings, modules.

SZÉLPÁL István (Szeged, August 9, 19l7 – Szeged, June 22, 1984) attended the University of Szeged. He taught at a secondary school but was dismissed for political reasons in 1949. After the death of Tibor Szele in 1955 he withdrew from mathematics and devoted himself to farming. Area of interest: algebra (groups, rings).

SZÉNÁSSY Barna (Ungvár [now Uzhhorod, Ukraine], December 11, 1913 – Debrecen, November 12, 1995) studied mathematics-physics in Debrecen and obtained his diploma in 1936. He taught at secondary schools and obtained in 1937 his Ph.D. in Debrecen with a dissertation on the infinitesimal ideas of Farkas Bolyai. He spent the year 1942/43 in Berlin. After military service and captivity, he was a teacher again until 1951. From 1951 until retirement in 1977 he worked at the University of Debrecen. He was awarded the degree of Candidate in 1962, Doctor of Mathematical Sciences in 1991. Area of interest: history of Hungarian mathematics.

SZENTMÁRTONY Tibor (Budapest, September 22, 1895 – Budapest, July 18, 1965). He obtained his diploma in 1921 from the University of Budapest. He held various positions at the Budapest Technical University from to 1950. After that he worked at the Mathematical Research Institute. Areas of interest: operator calculus, tensor calculus, probability.

SZÉP Jenő (Budapest, January 13, 1920 – Budapest, October 18, 2004) attended the University of Budapest from 1938 to 1943, and was assistant there from 1941 to 1946. From 1946 to 1961 he taught at the Teacher's Colleges in Budapest and Szeged. Became Candidate in 1952 and Doctor of Mathematical Sciences in 1957. From 1961 to 1993 he was a professor at the University for Economics in Budapest. In 1957 he received

the Prize of the Academy, in 1993 the Albert Szent-Györgyi Prize. Fields of research: groups and semigroups, game theory, applications of mathematics.

SZIDON Simon (in non-Hungarian publications he spelled his name **Sidon**) (1892 – Budapest, April 27, 1941) acquired a mathematics-physics teacher's diploma but because of his extreme shyness worked as an actuary. Area of research: trigonometric and power series, orthogonal systems. Sidon sets are named after him.

SZILÁRD Károly (Győr, September 26, 1901 – Budapest, April 5, 1980), brother of the famous physicist Leó Szilárd, studied in Germany between 1919 and 1925 in Jena and also in Göttingen, where he obtained his Ph.D in 1927. From 1925 to 1932 he worked in Berlin as an engineer and mathematician mainly in the industry, but in 1926–27 at the Kaiser Wilhelm Institut für Physikalische Chemie. Since 1925 he was a member of the German Communist Party and in 1933 he emigrated to the Soviet Union. From 1933 till 1948 he worked as a physicist at the Central Aero-Hydroinstitute in Moscow. In 1948 he was interned and worked on the development of missiles. In 1953 (still before Stalin's death!) he got a Stalin Prize. He was set free in 1956 and became an assistant editor of the Referetivnyi Zhurnal (Mathematics). He obtained the title of Candidate in Moscow in 1960. In the same year he returned to Hungary, where he worked at the Mathematical Reserarch Institute. He obtained the title of Doctor of Mathematical Sciences in 1976. Areas of interest: classical analysis, differential equations.

SZŐKEFALVI-NAGY Béla (in most of his publications he used the shorter form **Sz.-Nagy**) (Kolozsvár [now Cluj-Napoca, Romania], July 29, 1913 – Szeged, December 21, 1998). Son of Gyula Szőkefalvi-Nagy. He studied at the University of Szeged, where he got his Ph.D. on orthogonal systems in 1937. The next two years he spent some time in Leipzig, Grenoble and Paris, and from 1939 to 1948 he taught at the Teacher's College in Szeged. He habilitated in 1940 at the University of Szeged, where he became professor in 1948. He was awarded the Gyula Kőnig Prize in 1942, was elected corresponding member of the Hungarian Academy of Sciences in 1945, ordinary member in 1956. He was an honorary member of several academies: Soviet (1971), Irish (1973), Finnish (1976), and had several honorary doctorates (Dresden, Turku, Bordeaux, Szeged). He was awarded the Kossuth Prize in 1950 and 1953, the State Prize in 1978, the Tibor Szele Prize in 1978, the Lomonosov Gold Medal of the Russian Academy in

1980, and the Gold Medal of the Hungarian Academy of Sciences in 1987. Research areas: linear operators, approximation theory, Fourier analysis.

SZŐKEFALVI-NAGY Gyula (also **Sz.-Nagy, Sz. Nagy, von Sz. Nagy, Julius Sz. Nagy**) (Erzsébetváros [now Dumbrăveni, Romania], April 11, 1887 – Szeged, October 14, 1953). He started his studies at the University of Kolozsvár [now Cluj-Napoca, Romania] in 1905 and obtained his Ph.D. in 1909. He taught in secondary schools in Transylvania from 1909 till 1929. He spent the year 1911/12 in Göttingen, Germany, with a scholarship. He habilitated in Kolozsvár in 1915 and in Szeged in 1922, obtained the Gyula Kőnig Prize in 1926. In 1929 he moved to Szeged, where he first taught at the Teacher's College, and in 1939 became professor of geometry at the University. Between 1940 and 1945, when northern Transylvania returned to Hungary, he was a professor in Kolozsvár. In 1945 he returned to the University of Szeged. Became corresponding member of the Hungarian Academy of Sciences in 1934, ordinary member in 1946. Research areas: polynomials, algebraic curves, geometric constructions.

SZŰCS Adolf (Budapest, November 29, 1884 – Budapest, February, 1945) studied in Budapest and Paris (France). He obtained his teacher's diploma and his Ph.D. in 1907. Taught ten years at a secondary school, but was from 1912 also an assistant at the Budapest Technical University. Habilitated in 1913 and in 1920 he transferred completely to the Budapest Technical University. Areas of interest: partial differential equations, calculus of variations, algebra, diophantine approximation.

TAKÁCS Lajos (Maglód, August 21, 1924 –). He was placed second in the Eötvös Competition of 1943. Obtained his Ph.D. at the Budapest Technical University in 1948. He worked at the research laboratory of Tungsram (1945/55) and at the Mathematical Research Institute (1950/58). In 1953/58 he had a position also at the University of Budapest. In 1957 he obtained the title of Doctor of Mathematical Sciences. He left Hungary in 1958. In 1958/59 he was a visiting professor of the University of London, UK, in 1959/66 professor at Columbia University, New York, USA, and since 1966 at the Case Western Reserve University, USA. He was elected exterior member of the Hungarian Academy of Sciences in 1993. Area of research: probability, in particular stochastic processes and their applications.

TANDORI Károly (Novi Sad, Yugoslavia [now Serbia], August 23, 1925 – Szeged, January 24, 2005) studied at the University of Szeged (1944–1948), where he became an assistant at the Bolyai Institute in 1949. He obtained the degrees of Candidate in 1953 and Doctor of Mathematical

Sciences in 1957. He became a professor at the University of Szeged in 1962. He was elected a corresponding member of the Hungarian Academy of Sciences in 1965, and an ordinary member in 1976. He was awarded the Kossuth Prize in 1961, the Szele Tibor Prize in 1983, the Széchenyi Prize and Szent-Györgyi Albert Prize in 1992, the Pro Urbe Prize of Szeged in 1994, the title Honorary Doctorate of the University of Szeged in 1997, and the Szőkefalvi-Nagy Béla Memorial Medal of the Acta Scientiarum Mathematicarum in 2001. Research areas: general orthogonal series, Fourier series, strong laws of large numbers.

TARGONSKI György (Budapest, March 27, 1928 – München, Germany, January 10, 1998) studied at the University of Budapest from 1947 to 1952, and then taught at the Budapest Technical University. Left Hungary in 1956, and for several years had only short-term positions. He took a Ph.D. in theoretical physics in Cambridge, UK, in 1963. From 1963–1974 he was at the Fordham University in New York, USA, then 1974–1993 at the University of Marburg, Germany. Areas of research: iteration theory, functional equations, operator theory, theoretical physics.

TURÁN Pál (also Paul) (Budapest, August 18, 1910 – Budapest, September 26, 1976) studied at the University of Budapest, where in 1933 he obtained his teacher's diploma and in 1935 his Ph.D. He lived from tutoring until 1938 when he obtained a position at a secondary school. He habilitated in 1945, spent some time in Copenhagen (Denmark) and Princeton (USA) in 1946/47 and in 1949 was appointed professor at the University of Budapest. He was a visiting professor at many universities. He was elected corresponding member of the Hungarian Academy of Sciences in 1948, ordinary member in 1953. Was awarded the Kossuth Prize in 1948 and 1952, and the Tibor Szele Prize in 1975. His wife, Vera T. Sós, is the "grande dame" of Hungarian mathematics. Areas of interest: number theory, approximation and interpolation, complex function theory, graph theory. He developed the "power-sum method".

VÁLYI Gyula (also Julius) (Marosvásárhely [now Tîrgu Mureş, Romania], January 25, 1855 – Kolozsvár [now Cluj-Napoca, Romania], October 13, 1913) entered the University of Kolozsvár in 1873 to study mathematics and physics. He obtained his diploma in 1877 after which he spent two years in Berlin, Germany, with a scholarship. In 1880 he defended his doctoral dissertation on a partial differential equation coming from engineering. Kapteyn published in 1910 a revised version of Válvi's thesis. In 1881 Válvi became "Privatdozent" and started teaching at the University of Kolozsvár,

where in 1884 he became professor of theoretical physics and in 1885 professor of mathematics. In 1891 he was elected corresponding member of the Hungarian Academy of Sciences. Areas of research: partial differential equations, projective and analytic geometry, number theory, Bolyai studies.

VARGA Ottó (Szepetnek, November 22, 1909 – Budapest, June 14, 1969). As he was a child, his family moved to Késmárk [now Kežmarok, Slovakia], where he attended secondary school. He started to study construction engineering at the Technical University of Vienna, Austria. In 1928 he moved to Prague, Czechoslovakia, where he was a regular student at the Charles University but attended also the Technical University. In 1933 he obtained a mathematics and physics teacher's diploma and also a Ph.D. on Finsler spaces under the direction of L. Berwald. In 1934/35 he worked in Hamburg, Germany, with W. Blaschke and did research in integral geometry. In 1936 he returned to Prague and habilitated in 1937. In 1941 he returned to Hungary, first to Kolozsvár, and in 1942 to Debrecen. From 1958 to 1967 he was a professor at the Budapest Technical University and from 1967 he had a position at the Mathematical Research Institute. In 1944 he received the Gyula Kőnig Prize, in 1950 he was elected corresponding member of the Hungarian Academy of Sciences, in 1952 he was awarded the Kossuth Prize and in 1965 he was elected ordinary member of the Academy. Areas of research: differential geometry, integral geometry.

VÁZSONYI Endre (also Andrew) (Budapest, November 4, 1916 – Santa Rosa, California, USA, November 13, 2003) won the Eötvös Competition in 1934. He studied at the University of Budapest, where under the influence of Dénes Kőnig he got interested in the theory of graphs. He obtained his Ph.D. in 1938, then emigrated to the USA. Studied at Harvard University between 1942 and 1948, then worked as an aircraft engineer. In 1969/72 he was a professor of computer science at the University of California, and in 1972/79 at the University of Rochester. Areas of research: graph theory, operations research, differential equations, supersonic flight, mathematical economics.

VERESS Pál (also Paul) (Kolozsvár [now Cluj-Napoca, Romania], July 19, 1893 – Budapest, January 27, 1945) studied at the Universities of Budapest, Göttingen (Germany) and Kolozsvár. In Budapest he was a member of the Eötvös Collegium. Obtained in 1917 his Ph.D. in Kolozsvár, in 1919 his teacher's diploma, after which he taught in secondary school. He spent the year 1925/26 in Berlin, Germany. From 1928 he was a professor at the Teacher's College in Budapest and was also an instructor at the

Eötvös Collegium. He habilitated in Budapest in 1929, and between 1936 and 1938 he substituted for the professor of geometry. Between 1940 and 1944 with György Alexits, György Hajós and Ferenc Kárteszi he edited the "Mathematical and Didactical Journal" which replaced the KöMaL, suspended for racial reasons. Areas of interest: real analysis, actuarial mathematics, teaching of mathematics.

VERMES Pál (Újpest [now part of Budapest], July 31, 1897 – London, UK, February 26, l968) was a pupil of György Pólya in secondary school. He studied at the Budapest Technical University. In 1919 he interrupted his studies and worked in business in Hungary and Austria until 1938, when he emigrated to England. While teaching in a secondary school, he finished his mathematical education at Birkbeck College, where Pál Dienes was an instructor. He was awarded the Armitage-Smith Prize in 1945, received a doctorate in 1947, and was appointed lecturer in 1948. Areas of interest: summability, infinite matrices, complex function theory, graph theory.

VINCZE István (also Stephan) (Szeged, February 26, 1912 – Budapest, April 12, 1999) studied at the University of Szeged (1930/35) and then worked as an actuary. He obtained the degree of Candidate in 1952 and Doctor of Mathematical Sciences in 1972. In 1949 he became one of the founders of the Mathematical Research Institute in Budapest. He also taught at the Budapest Technical University in 1949/52, and at the University of Budapest in 1952/82. Areas of interest: statistics, inequalities, geometry, complex function theory.

WALD Ábrahám (Kolozsvár [now Cluj-Napoca, Romania], October 31, 1902 – India, December 13, 1950). He attended secondary school in Kolozsvár. When he graduated there in 1921, instruction at the local University was in Romanian, a language he was not familiar with, so he first got some private tutoring in mathematics, and in 1926 went to study in Vienna, Austria. There he attended the Technical University for a year and only then was accepted at the University, where he got into contact with Karl Menger. He soon had to return to Romania for his military service, but in 1930 he was again in Vienna, obtained his Ph.D. in 1931 and in 1933 he obtained a position at the Economics Institute led by Oskar Morgenstern. In 1938 he emigrated to the USA, where he worked at Columbia University. Areas of research: geometry, mathematical statistics.

WIGNER Jenő (also Eugene) (Budapest, November 17, 1902 – Princeton, New Jersey, USA, January 3, 1995) wanted to study physics but at the request of his father registered at the Budapest Technical University from

where he soon transferred to the Technische Hochschule in Berlin, Germany. There he attended the lectures of Einstein, Max Planck, Max von Laue, Werner Heisenberg, Wolfgang Pauli, etc. As a third year student he directed exercises at the Kaiser Wilhelm Institut. He obtained his Ph.D. in chemistry in 1925 under Mihály Polányi. In 1925/26 he worked in his father's factory in Budapest, and in 1926 he was called back to the Kaiser Wilhelm Institut. Then he was an assistant at the University of Berlin and in Göttingen. In 1929 he habilitated in Berlin. In 1930 he left Germany for Princeton University, USA, where he did not get tenure, so in 1936/38 he taught at the University of Wisconsin, USA. Then he returned to Princeton. He was awarded the Franklin Prize (1950), the Fermi Prize (1958), the Atoms for Peace Medal (1960), the Max Planck Medal (1961), the Nobel Prize in physics (1963), the Albert Einstein Prize (1972), the Leó Szilárd Medal of the Hungarian Nuclear Society (1994). He was elected to the National Academy of the USA, fellow of the Royal Society (1970), honorary member of the Loránd Eötvös Physical Society (1983), Honorary Doctor of the University of Budapest (1987), Honorary Member of the Hungarian Academy of Sciences (1988). His sister was the wife of P.A.M. Dirac. Scientific areas: group theory, representations of Lie groups, quantum mechanics.

WINTNER Aurél (Budapest, April 8, 1903 – Baltimore, Maryland, USA, January 15, 1958) studied at the University of Budapest from 1920 to 1924 but did not graduate there. In 1927 he went to Leipzig, Germany, where he got a Ph.D. in 1929. He spent 1929/30 in Rome, Italy, where he worked with T. Levi-Cività. In 1930 he married the daughter of Otto Hölder, and moved to Baltimore, USA, where he was on the faculty of Johns Hopkins University. In 1937/38 he was a visitor at the Institute of Advanced Study in Princeton, USA. Areas of research: astronomy, celestial mechanics, linear operators in Hilbert space, almost periodic functions, probability, number theory, ordinary differential equations, differential geometry.

ZÁNYI László (Budapest, May 5, 1905 – ?) attended the University of Budapest between 1925 and 1929, where he obtained a mathematics-physics teacher's diploma. Followed simultaneously theological studies, was ordained as a priest and joined the Piarist Order in 1929. He obtained a Ph.D. in 1933. He taught in secondary schools of the Piarist Order. After the secularization of church schools in 1948, he worked in 1949/50 as a curate, then left the country and lost contact with Hungary and mathematics. Area of interest: algebra, number theory.