

Publications by Gergő Nemes

August 5, 2021

1. G. Nemes, On the coefficients of the asymptotic expansion of $n!$, *Journal of Integer Sequences* **13** (2010), no. 6, Article 10.6.6, 5 pp. **MR2659222**
2. G. Nemes, New asymptotic expansion for the Gamma function, *Archiv der Mathematik* **95** (2010), no. 2, 161–169. **MR2674252**
3. G. Nemes, Asymptotic expansion for $\log n!$ in terms of the reciprocal of a triangular number, *Acta Mathematica Hungarica* **129** (2010), no. 3, 254–262. **MR2737726**
4. G. Nemes, More accurate approximations for the Gamma function, *Thai Journal of Mathematics* **9** (2011), no. 1, 21–28. **MR2833749**
5. G. Nemes, On the coefficients of an asymptotic expansion related to Somos' Quadratic Recurrence Constant, *Applicable Analysis and Discrete Mathematics* **5** (2011), no. 1, 60–66. **MR2809034**
6. G. Nemes, An asymptotic expansion for the Bernoulli Numbers of the Second Kind, *Journal of Integer Sequences* **14** (2011), no. 4, Article 11.4.8, 6 pp. **MR2792164**
7. A. Nemes, G. Nemes, A note on the Landau constants, *Applied Mathematics and Computation* **217** (2011), no. 21, 8543–8546. **MR2802265**
8. G. Nemes, Proofs of two conjectures on the Landau constants, *Journal of Mathematical Analysis and Applications* **388** (2012), no. 2, 838–844. **MR2869791**
9. G. Nemes, Approximations for the higher order coefficients in an asymptotic expansion for the Gamma function, *Journal of Mathematical Analysis and Applications* **396** (2012), no. 1, 417–424. **MR2956975**
10. G. Nemes, A remark on some accurate estimates of π , *Journal of Mathematical Inequalities* **6** (2012), no. 4, 517–521. **MR3051909**
11. G. Nemes, A solution to an open problem on Mathieu series posed by Hoorfar and Qi, *Acta Mathematica Vietnamica* **37** (2012), no. 3, 301–310. **MR3027223**
12. G. Nemes, Error bounds and exponential improvement for Hermite's asymptotic expansion for the Gamma function, *Applicable Analysis and Discrete Mathematics* **7** (2013), no. 1, 161–179. **MR3086174**
13. G. Nemes, Generalization of Binet's Gamma function formulas, *Integral Transforms and Special Functions* **24** (2013), no. 8, 597–606. **MR3171976**
14. G. Nemes, An explicit formula for the coefficients in Laplace's method, *Constructive Approximation* **38** (2013), no. 3, 471–487. **MR3122279**
15. G. Nemes, The resurgence properties of the large-order asymptotics of the Hankel and Bessel functions, *Analysis and Applications* **12** (2014), no. 4, 403–462. **MR3218920**
16. G. Nemes, The resurgence properties of the large order asymptotics of the Anger–Weber function I, *Journal of Classical Analysis* **4** (2014), no. 1, 1–39. **MR3321137**
17. G. Nemes, The resurgence properties of the large order asymptotics of the Anger–Weber function II, *Journal of Classical Analysis* **4** (2014), no. 2, 121–147. **MR3324455**

18. G. Nemes, Error bounds and exponential improvement for the asymptotic expansion of the Barnes G -function, *Proceedings of the Royal Society A: Mathematical, Physical and Engineering Sciences* **470** (2014), no. 2172, 14 pp. **MR3283510**
19. G. Nemes, On the large argument asymptotics of the Lommel function via Stieltjes transforms, *Asymptotic Analysis* **91** (2015), no. 3–4, 265–281. **MR3313459**
20. G. Nemes, Error bounds and exponential improvements for the asymptotic expansions of the gamma function and its reciprocal, *Proceedings of the Royal Society of Edinburgh: Section A Mathematics* **145** (2015), no. 3, 571–596. **MR3371568**
21. G. Nemes, The resurgence properties of the incomplete gamma function II, *Studies in Applied Mathematics* **135** (2015), no. 1, 86–116. **MR3366821**
22. G. Nemes, The resurgence properties of the Hankel and Bessel functions of nearly equal order and argument, *Mathematische Annalen* **363** (2015), no. 3, 1207–1263. **MR3412357**
23. G. Nemes, The resurgence properties of the incomplete gamma function I, *Analysis and Applications* **14** (2016), no. 5, 631–677. **MR3530271**
24. G. Nemes, A. B. Olde Daalhuis, Uniform asymptotic expansion for the incomplete beta function, *Symmetry, Integrability and Geometry: Methods and Applications* **12** (2016), Article 101, 5 pp. **MR3564460**
25. G. Nemes, Error bounds for the large-argument asymptotic expansions of the Hankel and Bessel functions, *Acta Applicandae Mathematicae* **150** (2017), no. 1, 141–177. **MR3668093**
26. G. Nemes, Error bounds for the asymptotic expansion of the Hurwitz zeta function, *Proceedings of the Royal Society A: Mathematical, Physical and Engineering Sciences* **473** (2017), no. 2203, Article 20170363, 16 pp. **MR3685478**
27. T. Bennett, C. J. Howls, G. Nemes, A. B. Olde Daalhuis, Globally exact asymptotics for integrals with arbitrary order saddles, *SIAM Journal on Mathematical Analysis* **50** (2018), no. 2, 2144–2177. **MR3787779**
28. G. Nemes, Error bounds for the large-argument asymptotic expansions of the Lommel and allied functions, *Studies in Applied Mathematics* **140** (2018), no. 4, 508–541. **MR3798335**
29. G. Nemes, A. B. Olde Daalhuis, Asymptotic expansions for the incomplete gamma function in the transition regions, *Mathematics of Computation* **88** (2019), no. 318, 1805–1827. **MR3925486**
30. G. Nemes, A. B. Olde Daalhuis, Large-parameter asymptotic expansions for the Legendre and allied functions, *SIAM Journal on Mathematical Analysis* **52** (2020), no. 1, 437–470. **MR4057617**
31. G. Nemes, An extension of Laplace’s method, *Constructive Approximation* **51** (2020), no. 2, 247–272. **MR4076110**
32. Á. Baricz, G. Nemes, Asymptotic expansions for the radii of starlikeness of normalised Bessel functions, *Journal of Mathematical Analysis and Applications* **494** (2021), no. 2, Article 124624, 11 pp. **MR4154948**
33. G. Nemes, On the Borel summability of WKB solutions of certain Schrödinger-type differential equations, *Journal of Approximation Theory* **265** (2021), Article 105562, 30 pp. **MR4226390**
34. G. Nemes, Proofs of two conjectures on the real zeros of the cylinder and Airy functions, *SIAM Journal on Mathematical Analysis* **53** (2021), no. 4, 4328–4349. **MR4295047**