**András Juhász**

**Title**: Motivic Chern Classes of Coincident Root Loci

**Abstract:** The talk will be about the motivic Chern class of complex subvarieties $U \subset M$, $\mathrm{mC}(U \subset M) \in \mathrm{K}(M)[y]$. I will introduce this notion by highlighting some of its properties that help us in computations, and underline its importance by listing a few related invariants, such as the Hirzebruch $\chi_y$ genus. In particular, we managed to show, how the motivic Chern class of the dual of a plane curve encodes the Plücker formulae.

Then I will turn to the equivariant version of this theory. This gives us polynomials with coefficients in the equivariant K-theory of the ambient space which, in some important cases is strongly related to representation theory. I will describe what we mean by the universality of such mC classes by showing how from equivariant mC classes of coincident root loci mC classes such as of the dual curve can be computed. Joint work with László Fehér.