Limits of complex integrals

François Loeser[*1]

[1]Institut de Mathématiques de Jussieu-Paris Rive Gauche – Sorbonne Université, CNRS : UMR7586 – France

Abstract

I will explain how non-archimedean integrals considered by Chambert–Loir and Ducros naturally arise in asymptotics of families of complex integrals. To perform this analysis we work over a non-standard model of the field of complex numbers, which is endowed at the same time with an archimedean and a non-archimedean norm. Our main result states the existence of a natural morphism between bicomplexes of archimedean and non-archimedean forms which is compatible with integration. This is joint work with Antoine Ducros and Ehud Hrushovski.

[*]Speaker