

SPEAKER: Antoine Chambert -Loir (Rennes and IAS)

TITLE: Heights, equidistribution, analytic spaces, and a formula of Mahler

ABSTRACT: I will report on recent work concerning equidistribution of points of small height in algebraic varieties, for the complex and the p -adic topologies. The theory goes back to a ground-breaking paper of Szpiro, Ullmo, and Zhang, but we shall also need to explain its generalizations and their relevance. I will also explain an extension of a formula of Mahler in those contexts and detail its relation with Bost-Gillet-Soul's definition of heights in Arakelov geometry and, following Bedford-Taylor, Demailly and Maillot, complex pluripotential theory. At the end of the talk, I will describe the p -adic extension I obtained recently in joint work with Amaury Thuillier.