

Monday June 5

10:30 - 12:30 Valerio Toledano Laredo

Title: Stokes phenomena, Poisson-Lie groups and quantum groups

Abstract:

Let G be a complex reductive group, G^* its dual Poisson-Lie group, and \mathfrak{g} the Lie algebra of G . G -valued Stokes phenomena were exploited by P. Boalch to linearise the Poisson structure on G^* . I will explain how $U\mathfrak{g}$ -valued Stokes phenomena can be used to give a purely transcendental construction of the quantum group $U\mathfrak{h}\mathfrak{g}$. I will also show that the semiclassical limit of this construction recovers Boalch's. The latter result is joint work with Xiaomeng Xu.