

Research Talk: On resurgent Poisson structures and deformations

jeudi 8 juin 2023 17:00 (1 heure)

I will review the definition of the algebra A of simple \mathbb{Z} -resurgent series and its alien derivations Δ_m , as given by Jean Ecalle in 1981. In particular, I will recall why one can say that the alien derivations are independent in a strong sense. Then I will explore one consequence of the freeness of the Lie algebra generated by the Δ_m 's under commutators and multiplication by elements of A : since we have so many derivations (although we are dealing with a formal series of *one* variable), one can construct non-trivial Poisson structures on A and, correspondingly, non-commutative deformations of the product of A .

Orateur: SAUZIN, David (Observatoire de Paris Meudon)