

SEMPARIS – Séminaires en région parisienne

<http://string.lpthe.jussieu.fr/semparis/>

Workshop or Conference

Mercredi 16 Août 2017, 14 :00

LPTENS, Room Conf. IV (Workshop on "Exceptional and ubiquitous Painlevé equations for Physics". Please see webpage <https://indico.in2p3.fr/event/14720/>)

Domaines : math-ph

Titre : *Isomonodromic deformations and Painlevé equations*

Orateur : **Frank Loray (Université de Rennes I)**

Résumé : *Introductory review 90 min.*

We introduce the notion of isomonodromic deformations of linear systems on the Riemann sphere, and explain how Painlevé equations can be derived from them. Although we will mainly talk about the Painlevé VI case, related to fuchsian systems, we will explain how other Painlevé equations arise. We will deduce the Painlevé property from the Riemann-Hilbert correspondence. We will give a geometric description of the space of initial conditions, its symmetries, and how singularities arise.
