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Workshop or Conference

Jeudi 17 Août 2017, 15 :30
LPTENS, Room Conf. IV(Workshop on "Exceptional and ubiquitous Painlevé equations for Physics". Please see webpage https ://indico.in2p3.fr/event/14720/)
Domaines : math

Titre : *Geometric aspects of discrete Painlevé equations*

Orateur : **Yasuhiko Yamada (University of Kobe)**

Résumé : *90 min review talk. The theory of discrete Painlevé equations has made great progress in the last two decades. In this talk, we first study simple examples of discrete Painlevé equations using their autonomous limits as a clue. Then, after recapitulating the basic ideas of Sakai's geometric theory of Painlevé equations, we will give an explicit formulation of the most generic case : the elliptic difference Painlevé equation. Finally, we will derive the isomonodromic description (Lax formulation) based on the geometric method. If time permits we will also discuss the tau functions, special solutions, quantization etc. This talk is mainly based on a review with K.Kajiwara and M.Noumi arXiv :1509.08186.*