

Seminar: "Geometry&Physics", DFT (IFIN-HH)
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Location: DFT seminar room, IFIN-HH, Magurele

Date: Friday, March 17, 2017, 11:00 AM

Title: **From the QRT maps to elliptic difference Painlevé equations**

Speaker: **Prof. Tomoyuki Takenawa**
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Abstract: "It is well known that two-dimensional mappings preserving a rational elliptic fibration, like the Quispel-Roberts-Thompson mappings, can be deautonomized to discrete Painlevé equations. However, the dependence of this procedure on the choice of a particular elliptic fiber has not been sufficiently investigated. In this talk we establish a way of performing the deautonomization for a pair of an autonomous mapping and a fiber. Especially, in the case where the fiber is smooth elliptic, imposing certain restrictions on such non autonomous mappings, we obtain new and simple elliptic difference Painlevé equations, including examples whose symmetry groups do not appear explicitly in Sakai's classification. This talk is based on a joint project with A. Dzhamay and A. S. Cârstea."