SIDE 14.2



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Recurrence relations for the generalized Laguerre and Charlier orthogonal polynomials and discrete Painlevé equations

Monday 19 Jun 2023 at 17:30 (00h30')

Content :

We consider two examples of certain recurrence relations, or nonlinear discrete dynamical systems, that appear in the theory of orthogonal polynomials, from the point of view of Sakai's geometric theory of Painlevé equations. Of particular interest is the fact that both recurrences are regularized on the same family of rational algebraic surfaces, but at the same time their dynamics are non-equivalent. This is a joint work with Galina Filipuk, Xing Li, and Da-jun Zhang.

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