

Systèmes intégrables, modèles et algèbres exactement solubles
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Integrable systems, exactly solvable models and algebras
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Cluster algebra and its development

The cluster algebra was introduced by Fomin and Zelevinsky around 2000. The characteristic operation in the algebra called 'mutation' is related to various notions in mathematics and mathematical physics. In this talk, after explaining some basics of cluster algebras, I review two important aspects of cluster algebras in algebra of totally positive matrices, and in geometry of punctured surfaces.