zbMATH Open
THE FIRST RESOURCE FOR MATHEMATICS

Di Francesco, Philippe; **Kedem, Rinat**

Discrete non-commutative integrability: proof of a conjecture by M. Kontsevich. (English)

Zbl 1276.16025

Int. Math. Res. Not. 2010, No. 21, 4042-4063 (2010).

Summary: We prove a conjecture of Kontsevich regarding the solutions of rank 2 recursion relations for non-commutative variables, which, in the commutative case, reduce to rank 2 cluster algebras of affine type. The conjecture states that solutions are positive Laurent polynomials in the initial cluster variables. We prove this by the use of a non-commutative version of the path models, which we used for the commutative case.

MSC:

16S38	Rings arising from noncommutative algebraic geometry
37F10	Dynamics of complex polynomials, rational maps, entire and meromorphic functions; Fatou and Julia sets
13F60	Cluster algebras
05C90	Applications of graph theory

Cited in **1** Review
Cited in **12** Documents

Full Text: DOI

Edited by FIZ Karlsruhe, the European Mathematical Society and the Heidelberg Academy of Sciences and Humanities
© 2021 FIZ Karlsruhe GmbH