



Du
21
OCT.
2022

14h00
-
16h00

GROUPE DE TRAVAIL "TRANSCENDANCE ET COMBINATOIRE"

On the algebraicity of solutions of functional equations with one catalytic variable (part I)

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INSCRIPTION

ABSTRACT: Functional equations with one catalytic variable naturally appear in enumerative combinatorics (e.g. when counting planar maps, walks,...). The relevant solution of such an equation is a formal power series with polynomial coefficients in what is called the catalytic variable. Classifying the nature of this solution (e.g. algebraic, D-finite,...) has been an important topic of research since the 60's, starting with the works of Brown and Tutte. In 2006, Bousquet-Mélou and Jehanne obtained a general theorem giving the algebraicity of those solutions. In this talk, I will start by introducing those equations before stating and proving the result of Bousquet-Mélou and Jehanne.

URL of the page: <https://www.ihp.fr/fr/agenda/algebraicity-solutions-functional-equations-one-catalytic-variable-part-i>



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