SEMPARIS – Séminaires en région parisienne

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TBA

Lundi 23 Juillet 2018, 11 :00
IHES, Amphithéâtre Léon Motchane
Domaines : hep-th

Titre : *Hopf algebras from Feynman categories*

Orateur : **Ralph Kaufmann (Purdue University & IHES)**

Résumé : *We introduce Feynman categories and show that they naturally define bi-algebras. In good circumstances these bi-algebras have Hopf quotients. Corresponding to several levels of sophistication and decoration (both terms have technical definitions), we recover the Hopf algebras of Goncharov and Brown from number theory, a Hopf algebra of Baues used in the analysis of double loop spaces and the various Hopf algebras of Connes-Kreimer used in QFT as examples of the general theory. Co-actions also appear naturally in this context as we will explain.*