Hopf25

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IMB, UMR 5584 CNRS, Université Bourgogne Europe, France Plenary talk, Forum E Wednesday, April 23, 2025 10h30-10h55

Hopf Bigalois Extensions from Skew Parings of Hopf Algebroids

In a joint project with Xiao Han we are currently trying to develop the theory of Galois and bi-Galois extensions over Hopf algebroids. This seems initially hopeless because for a general Hopf algebroid H, not even H itself is bi-Galois in the most naive sense. In this talk we will report on how skew pairings of Hopf algebroids lead to a class of candidates that ought to be bi-Galois, and how we propose to set up the general theory to encompass these examples, at least when H (while not having an antipode) fulfills the analogous condition to having bijective antipode.