Hopf25

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Parallel sessions, Forum F

Wednesday, April 23, 2025

15h00-15h25

Reductions of Quantum Principal Bundles

From a geometric point of view, H-Galois algebra extensions correspond to quantum principal bundles, with the Hopf algebra H representing the structure group of the bundle.

We recall how the theory of reduction and prolongation of the structure group for principal bundles dualises to the algebraic setting of H-Galois extensions. We develop the theory of reduction of quantum principal bundles over projective bases by a sheaf theoretic approach.

Seminar based on a joint work with Rita Fioresi (Bologna) and Emanuele Latini (Bologna), https://arxiv.org/abs/2403.06830.