Noncommutative clusters for Lie groups over division rings

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For a Lie algebra $\mathfrak{g}$ defined over an arbitrary division ring, the universal enveloping algebra $U(\mathfrak{g}$ can be given the structure of a Hopf algebroid with a noncommutative base. We consider the dual of the isomorphism class of the Hopf algebroid, which in the commutative case is the coordinate ring of the corresponding Lie group. To this, we associate a noncommutative generalization of the standard cluster structure for semisimple Lie groups.

In Special Session 35 on Tropical Geometry, Twistor Spaces and Cluster Geometry at the Mathematical Congress of the Americas 2025.

MCA 2025 internal code: SS35-T12