

# Cohomological construction of quantum symmetric pairs

*Friday 8 February 2019 13:30 (1 hour)*

Braided module categories provide a conceptual framework for universal solutions of the (twisted) reflection equation, in analogy of what braided monoidal categories are for the quantum Yang-Baxter equation. In the theory of quantum groups, natural examples of braided module categories arise from the category of representations of a quantum symmetric pair coideal subalgebra as recently proved by M. Balagovic and S. Kolb. In this talk, I will describe the semi-classical interpretation of their construction and how this leads to a cohomological construction of quantized symmetric pairs in the context of deformation theory.

**Presenter:** APPEL, Andrea

**Session Classification:** Andrea Appel: Cohomological construction of quantum symmetric pairs