

**Seminar: Mathematical Physics Seminar**

When: Wed, March 23, 1:30-2:30

Zoom Link: available at <https://www.math.purdue.edu/~ebkaufma/seminar.html>

**Speaker:** Andrea Appel (University of Parma, Italy)

**Title:** Continuum Quantum Groups

**Abstract:**

Continuum Kac-Moody algebras are a natural generalisation of standard Kac-Moody algebras, where the role of simple roots is rather played by a “continuous” space of real roots. In this talk, I will provide an overview of such exotic Lie algebras and their quantum groups, describing both the combinatorics which underlies their definition and their “true” origin as Hall algebras of certain categories of geometric origin. This is based on joint work with F. Sala and O. Schiffmann.