



## **Online ISU Algebra Seminar**

**Date and Time:** March 3rd, 2022, from noon to 12:50 pm.

**Speaker:** Michael Lau, Ph.D. (Université Laval, Québec, Canada)

**Title:** Toda systems for Takiff algebras

**Abstract:** Toda systems were introduced in the late 1960s as integrable lattice models for nonlinear particle interactions. Their Hamiltonians can be reinterpreted in terms of Lie algebra root systems, with coadjoint orbits of Lie groups serving as their classical phase spaces. After an introduction from first principles, we will discuss how to extend and solve such integrable systems in the context of Takiff algebras, Lie algebras of matrices with entries in a ring of (truncated) polynomials of bounded degree.

### **Zoom Meeting Information**

<https://illinoisstate.zoom.us/j/91671891930?pwd=T3Ziam4zWE5sOXdlNnRUV3NsbGdHdz09>

Meeting ID: 916 7189 1930

Passcode: ISUMath