



## Online ISU Algebra Seminar

**Title:** C-graded vertex algebras and Weyl vertex algebras under conformal flow.

**Speaker:** Florencia Orosz Hunziker (University of Denver)

**Date and Time:** April 20, 2023, 12:00 pm - 12:50 pm

**Zoom Room ID:** 944 5525 8835

(<https://illinoisstate.zoom.us/j/94455258835?pwd=aHBHL1cvY1BBMUpxNTIFTmpJdW8wdz09>)

**Passcode:** ISU

**Abstract:** We prove that a class of C-graded vertex algebras satisfying suitable conditions are rational, i.e., have semisimple representation theory, with a one-dimensional level zero Zhu algebra. We apply our result to the rank one Weyl vertex algebra and show that its representation theory changes significantly under conformal flow. This talk is based on joint work with K. Barron, K. Batistelli, V. Pedic, and G. Yamskulna.

**About Speaker:** Dr. Orosz-Hunziker received her Ph.D. at Yale University in 2019. She was a lecturer in Mathematics at Harvard University from 2019 to 2020, and a Burnett Meyer postdoc in the mathematics department at the University of Colorado, Boulder from 2020 to 2021. Currently, Dr. Orosz-Hunziker is an NSF fellow in mathematics at the University of Denver.

Dr. Orosz-Hunziker's research interests are Vertex algebra theory, Lie theory and representation theory.