

ISU Algebra Seminar



Date: October 24th, 2019

Time: 1:00pm-1:50pm

Location: STV 347B

Speaker: Darlayne Addabbo

Department of Mathematics, University of Notre Dame

Title: Zhu algebras for vertex operator algebras

Abstract: Given a vertex operator algebra, V , there is a family of associative algebras, $A_n(V)$, $n \in \mathbb{N}$, called Zhu algebras, which can be used to study the representation theory of V . We will define these Zhu algebras and discuss techniques used in determining their structure. We will give an example clarifying the necessity of certain conditions in defining the Zhu algebras, $A_n(V)$, for $n > 0$, and present results for the Heisenberg and Virasoro vertex operator algebras for certain n . No prior knowledge of vertex operator algebras will be assumed. (This work is joint with Katrina Barron.)