



DEPARTMENT OF
MATHEMATICS
Illinois State University

ISU Math Colloquium/Algebra Seminar

Time: Thursday, April 27, 2023. 12:00 pm – 12:50 pm.

Zoom Room ID: 997 1216 4805

Passcode: ISU

Zoom Room Link: <https://illinoisstate.zoom.us/j/99712164805>

Speaker: Wenhua Zhao, ISU

Title: Some Generalizations of Two Dimensional Genus-Zero Conformal Field Theory

Abstract: We give an expository introduction to Segal's definition of two-dimensional Conformal Field Theory; the geometric theory by Y. Z. Huang of vertex operator algebras in terms of algebras over the operad of Riemann sphere with tubes; as well as the algebras over the operads of vector bundles or principal $G_{\mathbb{C}}$ -bundles with local trivializations, which can be viewed as generalizations of two-dimensional genus-zero Conformal Field Theory. The talk will be introductory and accessible to the general audience