

Speaker: Simon Wood Australian National University

> Tuesday, March 8, 2016 12:30 PM 258 Hurley Hall

Title: Universal vertex algebras and free field realisations

Abstract:

Vertex algebras such as the Virasoro vertex algebra or the affine vertex algebras can be defined through generators and relations for any central charge and almost any level. Generically these vertex algebras are simple as modules over themselves, however, for certain special values of the central charge or level they have non-trivial proper ideals, though they still have a unique simple quotient. In this talk I will discuss how one can use free field realisation and Zhu's algebra to classify the simple modules over such simple quotients of vertex algebras.