



Speaker: Antun Milas
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Thursday, March 19, 2015
12:15 PM
258 Hurley Hall

Title: False theta functions and representation theory

Abstract:

False theta functions are theta-like series with "wrong" signs in the q -expansion. They have appeared in various parts of mathematics including number theory and topology. I will first review how false theta functions naturally arise in representation theory of certain infinite dimensional algebras and vertex algebras. Then I'll explain how ideas of conformal field theory can be used to deduce their modular-like transformation properties and how these considerations lead to Verlinde-type formula for the fusion rules. This talk is largely based on joint works with T. Creutzig and K. Bringmann.