

Mathematics Colloquium

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**Modular Invariance in  
Chiral and Full  
Conformal Field Theories**

*Abstract: Full conformal field theories are projective linear representations of the moduli space of Riemann surfaces with parametrized boundaries equipped with a sewing operation. Chiral conformal field theories are linear representations of holomorphic vector bundles over the moduli space of Riemann surfaces with parametrized boundaries equipped with a suitable sewing operation. In particular, they give modular invariant functions or modular invariant spaces of functions. In this talk, I will discuss old and new results on the construction of such modular invariant functions or spaces of functions from representations of vertex operator algebras.*

**Wednesday, March 7**

**4:00-5:00 pm  
204 Smith Hall**