

Speaker: Prof. Christopher Beem, University of Oxford

Title: Vertex operator algebras from 4d SCFTs

Abstract:

In these lectures, I will give a pedagogical introduction to the construction of a canonical “associated vertex operator algebra” for any local $N=2$ supersymmetric conformal field theory (SCFT) in four dimensions. This construction gives rise to many interesting non-unitary VOAs, some familiar but mostly more exotic. I will highlight several non-generic structures and properties that these VOAs inherit (in some cases conjecturally) from their origins in four dimensional physics.

The lectures will assume a degree of familiarity with vertex operator algebras, but not much familiarity with four-dimensional SCFTs.