
CHRISTOPHER RAYMOND, University of Hamburg

Inverse Hamiltonian reduction in representation theory

An important question in vertex operator algebra theory is identifying the appropriate category of modules over a VOA to describe a chiral conformal field theory. The recently developed technique of inverse Hamiltonian reduction builds the simple objects for nonsemisimple and non-finite such categories in a natural way. I will give an introduction to this construction and show how it gives new techniques to study interesting families of weight modules for finite and affine Lie algebras.