

Northeastern University



Mathematics Department

Geometry, Physics, and Representation Theory Seminar

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Thursday, March 21, **2:50-3:50pm**, Lake Hall 509

Vertex algebra and Poisson vertex algebra cohomology

Abstract

We present an operadic approach to vertex algebra cohomology. A general construction associates a cohomology complex to a linear operad. In the case of the chiral operads we get a vertex algebra cohomology complex. Likewise, the associated graded of the chiral operad leads to a classical operad, which produces a Poisson vertex algebra cohomology complex. The latter is closely related to the variational Poisson cohomology.