

## Seminar/Talk

# Representation Theory of Vertex Operator Algebras and Gukov-Witten Defects

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#### Host: Tamas Hausel

A large class of vertex operator algebras can be ingeneered from junctions of interfaces in maximally upersymmetric 4d Yang-Mills theory. This viewpointprovides us with an intuitive way to study vertex operator algebras together with a link to many other physical and mathematical problems. I will describe the role of Gukov-Witten defects in four dimensions as vertex operator algebras of Julies. I will determine the Zhu algebras of a class of (generically non-freely generated) W-algebras Y\_{LMN} and use them to construct Zhu algebras of more complicated algebras. The techiques discussed in this talk play important role in various generalizations AGT correspondence and ramification of the geometric Langlands progam.

### Tuesday, July 3, 2018 03:00pm - 05:00pm

Mondi Seminar Room 2, Central Building



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