
ANTUN MILAS, SUNY-Albany

Chiral differential operators and quasi-lisse vertex algebras

Some time ago, Arkhipov and Gaiitsgory introduced the algebra of chiral differential operators (CDOs) on a semisimple group G within the framework of chiral algebras. The associated vertex algebra, known as the regular VOA, can be interpreted as a chiral analogue of the classical Peter–Weyl theorem for G . More recently, these vertex algebras have been revisited in the framework of genus zero S -class theories, developed by Arakawa and others. In this talk, we will present a construction of a family of vertex algebra closely related to the algebra of CDOs, but somewhat twisted so that they are conical. We shall discuss their properties in the case of $G=SL(2)$.