

Ideals for the deformed Virasoro minimal models

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The Virasoro algebra plays a fundamental role in conformal field theory and the theory of vertex operator algebras. Its deformation, the deformed Virasoro algebra, is closely related to the toroidal \mathfrak{gl}_1 algebra and to integrable lattice models in the conformal limit. For certain values of the central charge, the Virasoro algebra possesses a non-trivial two-sided ideal; the corresponding quotient is called a minimal model. In the undeformed case, this ideal can be described via the operator–state correspondence for the singular vector. We provide an explicit description of this ideal for a certain subclass of deformed minimal models. This is joint work in progress with Junichi Shiraishi and Simon Wood.