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**Drazen Adamovic\*** ([adamovic@math.hr](mailto:adamovic@math.hr)), Department of Mathematics, University of Zagreb,  
Bijenicka 30, 10 000 Zagreb, Croatia. *Realization of certain admissible  $A_1^{(1)}$ -modules.*

We will present our recent results on a realization of certain irreducible modules for the affine Lie algebra  $A_1^{(1)}$ . These modules are constructed by using the theory of generalized vertex algebras associated to rational lattices. We will discuss a connection between our realization and  $W$ -algebras associated to the  $(1,p)$  models for the Virasoro algebra. In particular, we will demonstrate that the  $W(2, 5)$  algebra with central charge  $-7$  appears as a subalgebra of a vertex operator algebra of affine type. (Received August 08, 2005)