

1009-17-196

Markus Rosellen* (rosellen@math.su.se), Sweden. *Vertex Algebras and Associative Algebras.*

We first point out that vertex Lie algebras are a full subcategory of the category of local Lie algebras (regular formal distribution Lie algebras in Kac's terminology). Our main result is that, analogously, vertex algebras are a full subcategory of the category of local associative algebras. The embedding is given by the Frenkel-Zhu enveloping algebra. A local associative algebra is a topological algebra with a local set of distributions. (Received August 16, 2005)