

1118-20-240

Simon Wood* (simon.wood@anu.edu.au). *Symmetric functions and their relation to free field vertex algebras*. Preliminary report.

Free field vertex algebras, while also being mathematically interesting in their own right, are an invaluable tool for constructing many other interesting vertex algebras. In this talk I will review how one can construct such free field realisations and how they are related to symmetric functions, in particular, how they distinguish certain bases of symmetric functions called Jack symmetric functions. These free field realisations will be used to present a new proof of the rationality of the $N=1$ superconformal minimal models and their module classification. (Received February 02, 2016)