

1125-VA-2476 **Nate Harman*** (nharman@mit.edu), 77 Massachusetts Ave, Cambridge, MA 02139. *Model theoretic limits of categories and representations of diagram algebras.*

I will talk about how tools and ideas from model theory and first order logic can give new insight into the representation theory of certain diagram algebras such as the partition and Brauer algebras. In particular I will show how use this method to give new (and short) proofs of the semisimplicity conditions for these algebras. (Received September 20, 2016)