► JAMES CUMMINGS, Infinitary methods in finite combinatorics.

Department of Mathematical Sciences, Carnegie Mellon University, Pittsburgh PA 15213, USA.

*E-mail*: jcumming@andrew.cmu.edu.

I will give an overview of some recent developments in the application of infinitary methods in finite combinatorics, notably the theories of *graph limits* [1] and *flag algebras* [2]. I will discuss some recent joint work with Michael Young and Ashwini Aroskar in this general area.

[1] L. LOVÁSZ AND B. SZEGEDY, *Limits of dense graph sequences*, *Journal of Combinatorial Theory (Series B)*, vol. 96 (2006), pp. 933–957.

[2] A. RAZBOROV, Flag algebras, Journal of Symbolic Logic, vol. 72 (2007), no. 4, pp. 1239–1282.