1023-03-414 Carol S. Wood* (cwood@wesleyan.edu), Wesleyan University, Department of Mathematics, 265 Church Street, Middletown, CT. Reducts of Omega-Categorical Theories.

In 1991 Simon Thomas proved there are only finitely many reducts of the theory of random graphs, and described all of them. This work was extended to other classes of structures by Thomas, and by his student James Bennett in the mid-1990's. We will describe their combinatorial approach to identifying all reducts, as well as Yun Lu's recent applications of these methods to bipartite graphs with various cross-types. (Received September 20, 2006)