1046-03-338   **Johann A. Makowsky*** (`janos@cs.technion.ac.il`). *Towards a theory of graph polynomials.* Preliminary report.

We survey our attempts to create a unifying theory of graph polynomials such as the chromatic polynomial, the Tutte polynomial and its generalizations, the interlace polynomial, and many others. We combine methods from model theory, such as definability criteria in fragments of second order logic and Feferman-Vaught type theorems, methods from algebra, such as generalized connection matrices, and methods from complexity theory. (Received August 27, 2008)