1064-13-321 **Dennis K. Moore*** (`dmoore@ms.uky.edu`), Department of Mathematics, 715 Patterson Office Tower, University of Kentucky, Lexington, KY 40506, and **Uwe R. Nagel** (`uwe.nagel@uky.edu`), Department of Mathematics, 715 Patterson Office Tower, University of Kentucky, Lexington, KY 40506. *Stable monomial ideals with a given Hilbert polynomial.*

Stable ideals are a class of monomial ideals with a simple combinatorial description. We present a recursive algorithm for generating all saturated strongly stable ideals with a given Hilbert polynomial. It adapts and extends ideas from the Ph.D. thesis *On the combinatorial structure of the Hilbert Scheme* by Alyson Reeves. (Received September 13, 2010)

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