1145-47-828   **Greg Knese*** (`geknese@wustl.edu`), Washington University in St. Louis, One Brookings Dr, Campus Box 1146, St. Louis, MO 63130. *The Polya class in several variables.* Preliminary report.

The Polya class consists of entire functions which are local uniform limits of stable polynomials, those with no zeros in the upper half plane (in the case of one variable) or in the product of upper half planes (in several variables). We will discuss how determinantal representations in two variables can be used to prove global bounds on stable polynomials which extend to the Polya class. We will also discuss progress on representing Polya class functions in two variables via infinite dimensional determinants. (Received September 15, 2018)