1127-32-335   **Greg Knese*** (`geknese@wustl.edu`), One Brookings Dr, Dept of Math, CB 1146, St. Louis, MO 63130. *Saturated polynomials and extreme points.* Preliminary report.

We will discuss an interesting class of polynomials in two variables, namely those with no zeros in the bidisk, finitely many zeros on the two-torus, and as many zeros on the two-torus as possible (given that there are finitely many such zeros). It turns out they have an interesting characterization in terms of integrability and sums of squares decompositions. We also

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discuss a connection of these polynomials to the problem of characterizing the extreme points in the space of analytic functions on the polydisk with positive real part. (Received February 06, 2017)