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**J. Maurice Rojas\*** ([rojas@math.tamu.edu](mailto:rojas@math.tamu.edu)), TAMU 3368, Mathematics Department, College Station, TX 77843-3368. *Randomization and Discriminant Chambers*. Preliminary report.

We give an introduction to discriminant chambers, which yield a powerful technique for many quantitative and algorithmic questions involving sparse polynomial systems. In particular, we will see how certain new quantitative estimates in fewnomial theory hold with high probability, and how this can be explained via certain connected components of the complement of an underlying A-discriminant.

Our discussion is entirely elementary, with many pictures and animations. (Received February 14, 2008)