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**Grigoriy Blekherman, Torin Greenwood** and **Rainer Sinn\*** ([sinn@math.gatech.edu](mailto:sinn@math.gatech.edu)). *More on the Geometry of Positive Semidefinite Matrix Completion*. Preliminary report.

We will study two geometric invariants of the positive semidefinite matrix completion problem, the Gaussian rank and the maximum likelihood threshold of a graph. We will give interpretations of these invariants from the point of view of algebraic geometry and sums of squares and give the first example of a graph where these two invariants are different. (Received August 27, 2016)