

1125-05-2360

Grigoriy Blekherman, Rainer Sinn* (sinn@math.gatech.edu) and **Mauricio Velasco**.

Positive semidefinite matrix completion and algebraic geometry. Preliminary report.

We sketch how the positive semidefinite matrix completion problem is related to questions in algebraic geometry and commutative algebra. The connection is made via geometry of spectrahedra. We will see recent results from joint work with Greg Blekherman and Mauricio Velasco. (Received September 20, 2016)