

1138-14-176

David E Anderson* (anderson.2804@osu.edu). *Degeneracy loci and the degree of semidefinite programming.*

In recent and ongoing work with William Fulton, we have found new formulas for symplectic degeneracy loci. For instance, our results include compact expressions for the degree of the variety of symmetric matrices of rank at most r . I will describe how to apply these formulas to compute the algebraic degree of semidefinite programming, providing a new perspective on work by Graf von Bothmer, Nie, Ranestad, and Sturmfels from 10-12 years ago. (Received February 08, 2018)