

1041-14-145

**Jen-Mei Chang, Michael Kirby and Chris Peterson\*** ([peterston@math.colostate.edu](mailto:peterston@math.colostate.edu)),  
Department of Mathematics, Colorado State University, Fort Collins, CO 80523-1874. *Grassmann  
Varieties, Schubert Varieties and Computer Vision.*

In this talk, we will see an interplay between Grassmann varieties, Schubert varieties and computer vision. The driving example underlying the talk will be provided by the illumination space of an object. The fact that the problem lends itself to such tools seems at first surprising but is ultimately very natural. As time permits, other instances of algebro-geometric objects arising in geometric data analysis will be presented. (Received August 12, 2008)