

1116-14-1439      **Michael Joswig** and **Joe Kileel\*** (jkileel@math.berkeley.edu), Department of Mathematics,  
UC Berkeley, CA 94720, and **Bernd Sturmfels** and **André Wagner**. *Rigid Multiview Varieties*.

The multiview variety from computer vision is generalized to images by  $n$  cameras of points linked by a distance constraint. The resulting five-dimensional variety lives in a product of  $2n$  projective planes. We determine defining polynomial equations, and we explore generalizations to scenarios of interest in applications. (Received September 19, 2015)