1116-15-2687 **Justin D. Marks*** (jdmarks@wesleyan.edu). *Comparative Analysis of Matrix Manifold Means.*
Applications of geometric data analysis often involve producing collections of subspaces, such as illumination spaces for digital imagery. For a given collection of points, a natural task is to find the mean of the collection. A robust suite of algorithms has been developed to generate mean representatives for a collection of subspaces of fixed dimension, or equivalently, a collection of points on a particular Grassmann manifold. These representatives include the flag mean, the normal mean, the projection mean, and the Karcher mean. In this talk, we present comparative heuristics and visualizations to examine the suite of mean representatives. (Received September 23, 2015)