In 1954, Semple considered Schubert’s space of triangles in $\mathbb{P}^2$ and described a smooth compactification with a modular interpretation. In this talk, I will describe a smooth compactification of the space of 4 points in general linear position in $\mathbb{P}^2$ and its relations to Semple’s compactification.

The goal of this research program is to find a modular resolution of singularities for the configuration of $n$ points in $\mathbb{P}^2$. By a theorem of Mnëv, this family of varieties exhibits every possible singularity. (Received September 19, 2011)