1056-C1-461 Meighan I. Dillon* (mdillon@spsu.edu), Mathematics Department, SPSU, 1100 S. Marietta Pkwy, Marietta, GA 30060. Projective Geometry and The Art of The Renaissance.

During the 15th century, Renaissance artists learned to use perspective mappings to represent three dimensional scenes on two dimensional walls and canvases. Perspective mappings turn out to be a critical element in the theory of projective spaces, which turn out to be the most natural setting for studying Euclidean geometry. In spite of a protracted flirtation with projective geometry, though, mathematicians did not discover a theory of projective spaces until 200 years after Renaissance artists started learning to use perspectivities. In this talk, we consider the gap between art and mathematics, as well as how it was resolved, over a theory that has proved as critical to the study of geometry in modern times as it has to the art and craft of representational painting. (Received September 08, 2009)