# MATH 3094 - Fall 2022
PROJECTIVE GEOMETRY

Projective geometry is a way of thinking about geometry that is over 2,000 years old. It was born out of art, application, and mathematical elegance. It is less restrictive than affine or Euclidean geometry, so its theorems have fewer exceptions and special cases. It is the setting for most modern research with a geometric foundation, and its ideas have permeated nearly every corner of mathematics.
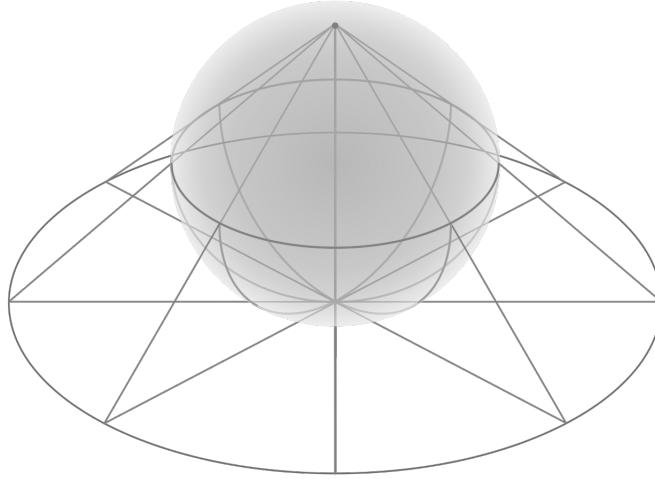
Outside of pure mathematics, the applications of projective geometry are wide ranging. Projective geometry plays a deep role in computer vision and graphics, and the ideas can be used as a basis for concepts in quantum mechanics. As the name suggests, projective geometry also features prominently in camera and film work.
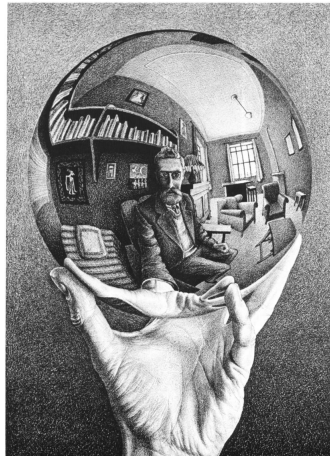
"Hand with Reflection" M. C. Escher

Prerequisites: Multivariable Calculus (MATH 2110), Linear Algebra (MATH 2210), and Transition to Advanced Mathematics (MATH 2710) or permission of the instructor.

Questions? Email the instructor, Hanson Smith, at `hanson.smith@uconn.edu`.