Abstract DRP

Nick Gilbert

April 2, 2021

1 Classifying Conics in $\mathbb{P}^2_{\mathbb{R}}$

$\mathbb{P}^2_{\mathbb{R}}$ or the projective plane over real numbers is the space of lines through the origin in $\mathbb{R}^3$. We are all familiar with conics in $\mathbb{R}^2$ (ellipse, hyperbola, parabola). In this talk, we will go over how to classify conics in the projective plane and how we can use symmetric matrices to help us define them.