1114-01-162 Elena Anne Corie Marchisotto* (emarchisotto@csun.edu). Insights into Bézout's theorem from Descartes to Pieri. Preliminary report.

A famous theorem of Étienne Bézout (1730-1783) enumerates the points of intersection of two plane curves. It has been proved in various ways. One way uses algebraic techniques to solve equations by eliminating variables. Another uses geometric techniques of Intersection Theory in Algebraic Geometry.

Within these two contexts, I will discuss, in addition to Bézout, three contributors to the rich conversation about proofs of the theorem: René Descartes (1596-1650), Michel Chasles (1793-1880) and Mario Pieri (1860-1913). (Received August 24, 2015)