

Enumerative geometry of Brill-Noether loci in Jacobians

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Abstract

This talk consists of a glimpse of applications of enumerative geometry of degeneracy loci into the study of Brill-Noether loci in Jacobians which provide a lot of information about special linear systems on algebraic curves. After a brief review of intersection theory, I will state several results about the enumerative geometry of degeneracy loci, e.g., the Chern class formulas, Euler characteristic formulas. Then, after introducing the basic notions about Brill-Noether loci in Jacobians of algebraic curves, we will see what the results about degeneracy loci tells us in this case and what are the geometric meanings. Nothing in this talk will be original.