

ON THE GEOMETRY OF GRASSMANNIANS

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INTRODUCTION

This paper studies linear systems of hyperplane sections on a Grassmann variety, or equivalently linear systems of skew symmetric forms on a vector space. The main object is to illustrate, by several examples, the interplay between projective-geometric properties of a family of algebraic varieties on the one hand and its analytic properties, especially the Hodge-structure in the cohomology ring of the varieties naturally associated to the family (its parameter space, its base locus), on the other.

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