ON THE GEOMETRY OF GRASSMANNIANS

RON Y. DONAGI

CONTENTS

INTRODUCTION

   This paper studies linear systems of hyperplane sections on a Grassman 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.