On branched coverings of some homogeneous spaces

Meeyoung Kim
Department of Mathematics
Michigan State University

Abstract

The Classical Barth-Lefschetz theorem asserts that SMALL codimensional subvarieties of projective space 'resemble' the ambient projective space. Similar phenomena occur for small codimensional subvarieties of more general homogeneous spaces. Results of Lazarsfeld assert that a similar situation occurs for LOW degree branched coverings of projective space. We obtain Barth-Lefschetz type theorems for low degree branched coverings of homogeneous spaces.