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Topological Methods in Algebraic Transformation Groups

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PREFACE

In recent years, there has been increasing interest and activity in the area of group actions on affine and projective algebraic varieties. Techniques from various branches of mathematics have been important for this study, especially those coming from the well-developed theory of smooth compact transformation groups. It was timely to have an interdisciplinary meeting on these topics.

We organized the conference "Topological Methods in Algebraic Transformation Groups," which was held at Rutgers University, 4-8 April, 1988. Our aim was to facilitate an exchange of ideas and techniques among mathematicians studying compact smooth transformation groups, algebraic transformation groups and related issues in algebraic and analytic geometry. The meeting was well attended, and these Proceedings offer a larger audience the opportunity to benefit from the excellent survey and specialized talks presented. The main topics concerned various aspects of group actions, algebraic quotients, homogeneous spaces and their compactifications.

The meeting was made possible by support from Rutgers University and the National Science Foundation. We express our deep appreciation for this support. We also thank Annette Neuen for her assistance with the technical preparation of these Proceedings.

The Editors.

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