

Lecture Notes in Mathematics

A collection of informal reports and seminars
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Proceedings of Liverpool Singularities Symposium II

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Springer-Verlag
Berlin · Heidelberg · New York 1971

AMS Subjekt Classifications (1970): 14D 05, 14E 15, 26A 54, 32B 10, 53 C 10, 53C 45, 53C 65, 57D 30, 57D 40, 57D 45, 57D 50, 57D 70, 57D 95, 58A 10, 58A 30, 34C 20, 53A 05, 53B 25, 58C 25, 81A 15, 83C 99

ISBN 3-540-05511-8 Springer-Verlag Berlin · Heidelberg · New York
ISBN 0-387-05511-8 Springer-Verlag New York · Heidelberg · Berlin

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Offsetdruck: Julius Beltz, Hemsbach/Bergstr.

Introduction

The papers in this volume and its predecessor were submitted by participants of the Symposium on Singularities of smooth manifolds and maps, held at the Department of Pure Mathematics at the University of Liverpool from September 1969 - August 1970, and supported by the Science Research Council. They include also the texts of the courses of lectures given at a Summer School held in July 1970 in connection with the Symposium. I have added some further notes to bring out the relations of the different papers in an attempt to make this volume as complete an exposition of the present state of knowledge in the subject as is possible within its scope. For this reason also we have reprinted the classic notes by Levine of lectures by Thom, which had become unavailable, and which represent the source of many of the ideas further developed in these papers.

Volume 1 contains the papers closely related to the problem of classification of singularities of smooth maps and is thus fairly coherent. Volume 2 represents applications of these ideas (and others) to other branches of pure and applied mathematics, arranged in order of subject. The lack of coherence is perhaps compensated by the wealth of unsolved problems which are raised in these pages.

Thanks are due to the S.R.C. for financial support; to Mrs. Evelyn Quayle (nee Hastwell) and Mrs. Eileen Bratt for doing the typing; to members of the department for proofreading it; and of course to the participants in the Symposium for creating the body of mathematics here presented.

Liverpool, March 1971

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