# CONTEMPORARY MATHEMATICS

205

## Multidimensional Complex Analysis and Partial Differential Equations

A Collection of Papers in Honor of François Treves

Proceedings of the Brazil-USA Conference on Multidimensional Complex Analysis and Partial Differential Equations June 12–16, 1995 São Carlos, Brazil

> Paulo D. Cordaro Howard Jacobowitz Editors

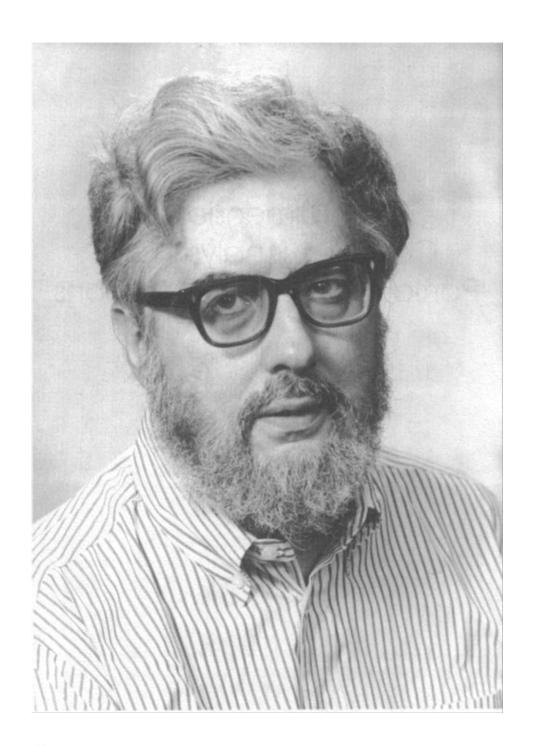


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FRANÇOIS TREVES

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### **Preface**

These papers commemorate the sixty-fifth birthday of Professor François Treves. François Treves received his doctorate in 1958 under the direction of Professor Laurent Schwartz. He has since made many deep, varied, and lasting contributions to partial differential equations, pseudodifferential operators, hypo-analytic structures and complex analysis.

His elegant expository writings have played a significant role in making many aspects of analysis accessible to a wide mathematical audience. This was recognized when the Mathematical Association of America awarded him the Chauvenet Prize for his paper "On the Local Solvability of Linear Partial Differential Equations" and again when the American Mathematical Society awarded him the Steele Prize for his monograph "Pseudodifferential and Fourier Integral Operators".

Colleagues, students, and friends offer this volume to François Treves with affection and respect as a tribute to his outstanding contributions to mathematics. Some of the papers were presented at the "Brazil-USA Conference on Multidimensional Complex Analysis and Partial Differential Equations", São Carlos, Brazil, in June 1995. This conference was dedicated to Professor Treves in recognition of his influence on the development of analysis in Brazil through his many visits and his personal ties with many Brazilian mathematicians.

Paulo D. Cordaro Howard Jacobowitz

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### Multidimensional Complex Analysis and Partial Differential Equations

Paulo D. Cordaro and Howard Jacobowitz, Editors

This collection of papers by outstanding contributors in analysis, partial differential equations, and several complex variables is dedicated to Professor Treves in honor of his 65th birthday. There are five important survey articles covering analytic singularities, holomorphically nondegenerate algebraic hypersurfaces, analyticity of CR mappings, removable singularities of vector fields, and local solvability for systems of vector fields. The other papers are original research contributions on topics such as Klein-Gordon and Dirac equations, Toeplitz operators, elliptic structures, complexification of Lie groups, pseudo-differential operators, nonlinear equations, CR and Mizohata structures, analytic hypoellipticity, overdetermined systems, and group invariant convex hypersurfaces.

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