

INTRODUCTION

Tom Wolff's legacy to mathematical analysis is truly exceptional and will be an inspiration to future generations. In his persistent style of going after the "longstanding problems," he invariably changed the level of the subjects he worked on: complex variables, harmonic function theory, unique continuation, and Fourier analysis, to mention a few. His contributions are marked by both a proper understanding of the issues and unmatched technical power to resolve them.

A few highlights of his work (according to personal appreciation):

—A new approach to the corona theorem for bounded analytic functions on the disc, which did much to revive the field.

—Planar harmonic measure and the solution of Øksendal's conjecture in two dimensions (jointly with Peter Jones).

—Harmonic function theory in dimensions greater than 2 and the disproof of the Bers and related conjectures.

—New results in unique continuation theory, combining Carleman's method with novel geometric considerations related to the Laplace transform of a measure.

—Introduction of methods from discrete and computational geometry in problems of measure and Hausdorff dimension, particularly in the study of "Kakeya-type" questions related to Fourier analysis.

Wolff also contributed substantially to the theory of random Schrödinger operators. Some of his unpublished papers will appear in the next volume of *Journal d'Analyse Mathématique*. The papers in the present volume were contributed by Tom's collaborators, former students, and friends. If perhaps they do not reach the high standards of Tom's work, all of them express their authors' esteem for a cruelly missed co-worker.

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