

Preface

Calixto P. Calderon, like many Argentine mathematicians of his generation, was introduced and mentored into Harmonic Analysis and Partial Differential Equations at the University of Buenos Aires by Alberto Gonzalez Dominguez, his teacher and Ph.D. advisor, whose mentor was David Tamarkin of Brown University. Moreover, Calixto P. Calderon proved very early in his career to be an influential teacher and mentor for Luis A. Caffarelli, a world authority on Free Boundary Value Problems in Partial Differential Equations and recent recipient of the prestigious Israel's Wolf Prize.

The papers presented by his friends or colleagues and some of his former doctoral students at the conference in honor of Calixto P. Calderon at Roosevelt University were indicative to a large extent of the wide scope and depth of his research work and scholarship in pure and applied mathematics. Furthermore, the friendly and festive atmosphere among the participants at the conference from the USA and Latin America reflected very much his wonderful charismatic personality and humility. A memorable moment was the scene where the president of Roosevelt University, while addressing the participants briefly, asked those in the audience who were Calixto P. Calderon's students to raise their hands, and Luis A. Caffarelli's hand went up!

Calixto P. Calderon's numerous research publications include: Classical Fourier series and Orthogonal Expansions, Calderon-Zygmund Theory of Singular Integrals, Ordinary and Partial Differential Equations especially the Navier-Stokes p.d.e, Probability Theory, Mathematical Models Applied to Biology and Medicine, and History of Mathematics and Science. Clearly, his work in pure Mathematics was influenced by Alberto Gonzalez Dominguez, Alberto C. Calderon—his brother, Antoni Zygmund, and several other collaborators and colleagues. Whereas his considerable research work in Mathematical Biology and Medicine might have been the result of the influence he received while growing up from his father, Dr. Pedro J. Calderon, an accomplished physician trained in Medicine in Buenos Aires and Paris. One can't help but note that, likewise, the father of Aristotle, Nicomachus, who

did experimental research in Biology and Botany, although he was Plato's greatest student of pure philosophy, was also a medical physician and, in fact, the personal physician of King Philip of Macedon.

Except for the appointments at the University of Cuyo, the University of Buenos Aires, and the University of Minnesota, Calixto P. Calderon spent most of his distinguished academic career at the University of Illinois at Chicago (U.I.C.). He taught a variety of courses ranging from Harmonic Analysis and Partial Differential Equations to Probability Theory and Statistics, and had several Ph.D. students. His strong interest in probability and statistics may be attributed in part to his Statistics teacher—Roque Carranza at the University of Buenos Aires. He wrote two papers on the subject including a paper on Kolmogorov's strong law of large numbers for pair-wise independent random variables. The themes of the thesis of his Ph.D. students, like his research, ranged from Harmonic Analysis to the history of Spanish mathematics and related science. During his tenure at U.I.C., Calixto P. Calderon was an active participant and invited speaker at seminars in the Chicago area, including the Calderon-Zygmund Seminar at the University of Chicago, and the analysis seminars at U.I.C., and at DePaul University. Furthermore, Calixto P. Calderon was an excellent and eloquent lecturer, and remained actively engaged in issues related to mathematics education at U.I.C.

The editors of this volume of chapters would like to thank the organizers of the conference in honor of Calixto P. Calderon and the authors of the contributed papers.

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