



This special issue is dedicated to  
Professor K. R. Parthasarathy  
on the occasion of  
his seventy-fifth birthday

## Preface

Kalyanapuram Rangachari Parthasarathy, fondly known to many as “KRP” and to some as “Partha” was born in Chennai in 1936, and had his academic training in Vivekananda College there, followed by the Indian Statistical Institute (I.S.I.), Kolkata (1956-61). He was one of the “famous four” (the others were R. Ranga Rao, V. S. Varadarajan, and S. R. S. Varadhan, a later entry) in I.S.I. during 1956-1963, who taught each other modern mathematics. KRP was awarded in 1961 the first Ph.D. degree of I.S.I. and after a visit of A. N. Kolmogorov to India, spent a year with him in Moscow and participated in the famed seminars of Gel’fand and Dynkin.

KRP taught in the Universities of Sheffield and Manchester, U.K. during 1965-70. Then he returned to India, and after a few years in Bombay University and the Indian Institute of Technology in Delhi, he came back in 1976 to the fledgling new Centre of I.S.I. in Delhi to build up its Mathematics-Statistics unit and he stayed there till he retired in 1996.

KRP has always been a no-nonsense man, very demanding in mathematical expositions. His favourite line was “writing or talking mathematics is all about economy of thought and of expression.” He is blessed with the extraordinary facility of jumping between different areas of mathematics – in a sense he has the ability to see connections where most others would not. The areas of KRP’s research is too vast to describe here in any detail. The canvas encompasses: (i) Information theory, classical in early years and quantum in the last decade; (ii) Limit theorems, weak convergence and infinite divisibility in probability theory; (iii) Lie groups and probability measures on them; (iv) Mathematical formulations of quantum mechanics – imprimitivity systems and perturbation of operators in a Hilbert space; (v) Quantum stochastic calculus – in which he was the pioneer along with R. L. Hudson.

KRP is a brilliant teacher and an inspiration to many generations of Indian students and researchers (including the under-signed). He has authored many books, monographs and lecture-notes, all written in his impeccable style, and they are treasured by the students and researchers world over.

One of us (KBS) collaborated extensively with KRP for over two decades and the other (BVRB) earned Ph.D. under his guidance. It is a great honour and privilege for us to dedicate this issue of “Communications on Stochastic Analysis” to KRP/Partha, a brilliant researcher and teacher, on his 75th birthday.

*Kalyan Bidhan Sinha and B. V. Rajarama Bhat*