

Jyotiprasad Medhi Memorial Annual Lecture

Department of Mathematics

IIT Guwahati

September 7, 2018

Title: Brownian Motion

Speaker: Prof. B. V. Rao, Chennai Mathematical Institute

Venue: Lecture Hall 4, IIT Guwahati

Time: 3:30 PM, September 7, 2018

ABSTRACT

Jyoti Prasad Medhi contributed, among other things, extensively to queueing models and Poisson processes. He did discuss, but briefly, stationary processes and Brownian Motion. This lecture outlines a historical account of Brownian motion. We undertake journey, starting with ‘pollen particle motion’ of Robert Brown to ‘stock price fluctuation’ of Louis Bachelier to ‘molecular bombardment’ interpretation of Albert Einstein to ‘mathematical formulation’ of Norbert Wiener to ‘Markov process’ view of Andrei Kolmogorov to ‘random walk’ view of Monroe Donsker to ‘heat equation with small potential’ view of Richard Feynman to ‘stochastic calculus’ of Kiyosi Ito. If time permits, we enter and explore flowers in this last mentioned garden.