



**PONDICHERRY UNIVERSITY**  
**DEPARTMENT OF STATISTICS**

Ramanujan School of Mathematical Sciences

*All Students, Research Scholars and Faculty Members  
are cordially invited for Special Lecture Program*

*on*

**The Genesis of EM Algorithm:  
From Biology to Statistics**

*Delivered By*

*Prof. Saurabh Ghosh*

*Human Genetics Unit, Biological Sciences*

*Indian Statistical Institute, Kolkata*

**Schedule and Venue of the Program:**

Date	Time	Venue
February 13, 2019	02:00 pm -03:30 pm	Seminar Hall Dep. of Statistics, RSMS, PU

Dr. Navin Chandra  
(Coordinator)

Dr. P. Tirupathi Rao  
(Convener and Head)

# **The Genesis of EM Algorithm: From Biology to Statistics**

Prof. Saurabh Ghosh  
Human Genetics Unit  
Biological Sciences  
Indian Statistical Institute, Kolkata

## **ABSTRACT**

The EM Algorithm proposed by Dempster, Laird and Rubin (1977) was motivated by the problem of estimation of allele frequencies from blood group data. In this talk, I shall discuss the genetic background and the statistical framework of this problem. I shall also discuss the use of the EM Algorithm in estimating parameters in other set-ups where there are "missing" data.