

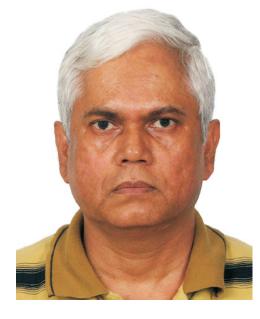
INDIAN INSTITUTE OF SCIENCE BANGALORE

## **INSTITUTE COLLOQUIUM**

(Divn. of Physical & Mathematical Sciences)

Professor Mrinal K. Ghosh Department of Mathematics

## The pricing of corporate liabilities via options



## Abstract:

We begin with a brief introduction to Black-Scholes theory of option pricing. We then describe the structural approach to credit risk. We identify the equity and the debt of a firm as appropriate options on the asset of the firm. Using this we derive the price of the debt and the default probability. Finally we develop an EM algorithm to estimate the relevant parameters associated with the asset of the firm.

Date: Wednesday, 22nd February 2017

Venue : Faculty Hall, Main Building

Time: 4-00 p.m.

Professor Anurag Kumar, Director will preside

Tea: 5-00 p.m. All are Welcome