## **DECLARATION**

This thesis is a presentation of my original research work. Wherever contributions of others are involved, every effort is made to indicate this clearly, with due reference to the literature, and acknowledgement of collaborative research and discussions.

The work was done under the guidance of Professor A R Rao, at the Tata Institute of Fundamental Research, Mumbai.

Debdutta Paul DEBDUTTA PAUL

In my capacity as supervisor of the candidate's thesis, I certify that the above statements are true to the best of my knowledge.

Professor A R RAO

Date: 22 Oct 2015