

**Bhabha Atomic Research Centre  
BARC Training School, Mumbai**

**MINI-PROJECT PROPOSAL FORMAT**

Mini Project ID:

To be left blank

Discipline

PHYSICS

Title of Mini-Project:

Classical and quantum error-correction codes

**Guide's Details**

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**Brief Scope of Work**

Quantum computing and information is an important emerging area of research. The mini-project will provide a significant exposure to the Trainee and help make a contribution to the programme initiated at BARC. Error-correction is at the heart of any reliable computation. In the mini-project, fundamental ideas and methods will be applied to correct errors for a few qubit systems. In doing so, classical methods will play an important role. The experimental possibility of incorporating these ideas will be developed and reviewed.

*Sudhir*  
*04-05-2022*  
Signature and Seal of Head of Division / Coordinating Official

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