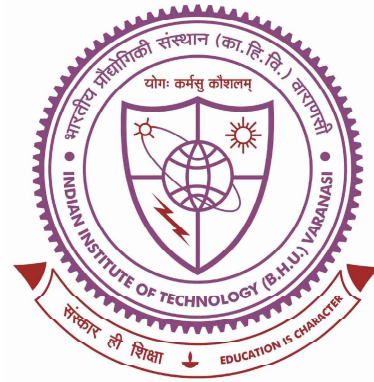


# Magnetic and Magnetotransport properties of some Quantum Materials



**THESIS SUBMITTED IN PARTIAL FULFILLMENT FOR THE AWARD OF  
DEGREE**

DOCTOR OF PHILOSOPHY

in

**PHYSICS**

by

**SWAYANGSIDDHA GHOSH**

*Supervisor*

**PROF. SANDIP CHATTERJEE**

DEPARTMENT OF PHYSICS

**INDIAN INSTITUTE OF TECHNOLOGY**

**BANARAS HINDU UNIVERSITY**

**VARANASI - 221005**

ROLL NUMBER  
19171504

YEAR OF SUBMISSION  
2025