Sourav Majumder

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Reserach Interests

Quantum hybrid devices, Superconducting qubits

Education

Indian Institute of Science (IISc), Bengaluru
Graduate Student in Physics 2017 - *Present*

Indian Institute of Science (IISc), Bengaluru
M.S. Physics 2015 - 2017

Ramakrishna Mission Residential College (RKMRC), Narendrapur
B.Sc. (Hons.) Physics 2012 - 2015

Employment

Graduate Student
Indian Institute of Science (IISc), Bengaluru
Mentored by Dr. Vibhor Singh Aug 2017 - *Present*
Topic - Hybrid quantum devices

Summer Project Intern
Indian Institute of Science (IISc), Bengaluru
Mentored by Dr. Vibhor Singh May 2017 - July 2017
Topic - Transmon in 3D Cavity

Publications

2. **Optomechanical Platform with a Three-dimensional Waveguide Cavity**
   Bindu Gunupudi, Soumya Ranjan Das, Rohit Navarathna, Sudhir Kumar Sahu, **Sourav Majumder**, and Vibhor Singh
   Phys. Rev. Applied 11, 024067 - Published 26 February 2019, arXiv:1902.06215.
1. **Large flux-mediated coupling in hybrid electromechanical system with a transmon qubit**
   Tanmoy Bera, **Sourav Majumder**, Sudhir Kumar Sahu, and Vibhor Singh
   Communications Physics 4, 12 (2021) - Published 19 January 2021, arXiv:2001.05700.

Conferences, and other Meetings

- Talk titled *Relaxation of a transmon qubit from unconfined states and resurgence of coherence* at **APS March Meeting 2021**, American Physical Society, March 2021.
- Participant, **International Workshop on Electron and Ions in/on Helium (EIH 2020)**, IISc, Bengaluru, India, January 2020.
- Poster titled *Losses and dynamic range of a strongly driven circuit-QED system* at **ISNTT-2019**, NTT Basic Research Laboratory, Atsugi, Japan, November 2019.
- Poster titled *Towards the development of a hybrid system for synthesizing single phonon state* at **In-house Symposium**, IISc, Bengaluru, India, November 2018.
- Poster titled *Fabrication and characterization of a superconducting 3D-transmon qubit* at **In-house Symposium**, IISc, Bengaluru, India, November 2017.

Hackathons

- Participant, **The Qiskit Challenge India**, Qiskit, September 2018

Technical Skills

Programming Languages - Python, C, C++, Shell Script
Softwares - MATLAB, Mathematica
Tools/Frameworks - LaTeX, Git

Scores and Awards

- Scored 960/990 on the Subject GRE in Physics, October 2017
- Secured all-India rank 21 in the Joint Entrance Screening Test (JEST), 2018 for admission into Physics PhD programmes in India
- Awarded the ICTS S.N. Bhatt Memorial Excellence Fellowship, 2018
- Selected for the Summer Research Fellowship of the Indian Academy of Sciences in 2016
- Recepient of the INSPIRE-DST Scholarship for Higher Education for the period 2013 to 2018

References

- Prof. Parameswaran Ajith, ICTS – ajith@icts.res.in
- Dr. Shasvath Kapadia, ICTS – shasvath.kapadia@icts.res.in
- Dr. Sumit Kumar, AEI Hannover – sumit.kumar@aei.mpg.de
- Prof. Bala Iyer, ICTS – bala.iyer@icts.res.in