

Prof. M. K. Sundaresan Memorial Workshop on Quantum Computing

Organized by
Department of Physics, Sri Sathya Sai Institute of Higher Learning,
Prasanthi Nilayam Campus
30th January 2023

(Venue: Multimedia Learning Centre, PSN Campus; Hybrid Mode)

Session – I

9:05 – 9:30 AM

Vedam Chanting & Lighting Lamp

Welcome Note: Dr. Deepa Seetharaman, Head, Dept. of Physics, SSSIHL

Inaugural Address: Prof. B. Sai Giridhar, Vice Chancellor, SSSIHL

9:35 – 10:35 AM

Invited Talk

Solving an Eigenvalue Problem on a Noisy Quantum Computer

Expert: Dr. Vamshi M. Katukuri,

Scientist, Max Planck Institute for Solid State Research, Stuttgart, Germany

<https://vamshimohank.gitlab.io/myhome/>

10:35 – 10:45 AM

TEA BREAK

10:50 – 11:50 AM

Hands-on workshop module

Implementing Basic Principles on Quantum Computer

Different types of hardware and their physical realization in superconductors, ion trap, photonic computing

Expert: Dr. Bharadwaj Chowdary Mummaneni,

Scientific Staff at Fraunhofer IAO in Quantum Computing,

Stuttgart, Baden-Württemberg, Germany

https://de.linkedin.com/in/bharadwaj-c-mummaneni?trk=public_profile_browsemap

11:50 AM – 1:10 PM

LUNCH BREAK

Session - II

1:15 – 2:15 PM

Invited Talk

Introduction to Quantum Machine Learning and Qiskit

Expert: Ms. Pranshi Saxena,

Quantum Computing Researcher – Deloitte, Qiskit Advocate – IBM Quantum

www.linkedin.com/in/pranshi-saxena-17a3817a

2:20 – 3:20 PM

Invited Talk

Hybrid Quantum Machine Learning Algorithms- Use Cases in Image Classification

Expert: Dr. Jayasri D,

Associate Professor and Quantum Computing Consultant,

Ecole Centrale School of Engineering, Mahindra Univ., Hyderabad, Telangana

<http://linkedin.com/in/jayasri-dontabhaktuni-21811219>

3:30 PM

Vote of thanks - Dr. K Vijay Sai, Associate Head, Dept. of Physics, SSSIHL