

Session Program

22-24 Jun 2022



Siam Physics Congress 2022 (SPC2022)

S5 Quantum Technology

Thursday 23 June

10:45

S5 Quantum Technology: Oral presentation 7

Session | Location: RUBY

10:45-11:15

Quantum-inspired Computation for Optimization and Supervised Machine Learning

Speaker

Thiparat Chotibut

11:15-11:30

Random-telegraph noise mitigation and qubit decoherence in solid-state experiments

Speaker

Nattawut Kamjam

11:30-11:45

Estimating unknown qubit phase under telegraph noises using Recurrent Neural Network

Speaker

Suttavee Rojanasirivanit

11:45-12:00

Qubit decoherence and phase correction in Gaussian white-noise environment

Speaker

Atirat Meunson

12:00

16:15

S5 Quantum Technology: Oral presentation 13

Session | Location: RUBY

16:15-16:30

Time-domain measurements with superconducting flux qubits for diabatic quantum annealing experiments

Speaker

Nuttamas Tubsrinuan

16:30-16:45

Simulation of diatomic ground state energy in IBM quantum

Speaker

Ms Nuttha Utsaha

16:45-17:00

The Dirac impenetrable barrier in the limit point of the Klein energy zone

Speaker

Salvatore De Vincenzo

17:00-17:15

Identifying Electronic Transition for 2 eV Hexagonal Boron Nitride Quantum Emitters

Speaker

Cheewawut Na Talang

17:15-17:30

Determination of the concentration of glucose-ethanol-water mixtures using spectroscopic surface plasmon resonance on smartphone

Speaker

Mr Prasert Chimplikanon

17:30

Friday 24 June

09:00

S5 Quantum Technology: Oral presentation 7

Session | Location: RUBY

09:00–09:30 **Quantum Simulation via Quantum Gas Microscope**

Speaker

Pimonpan Sompert

09:30–09:45 **Active vibration isolator using piezoelectric actuator**

Speaker

Mr Nuttanan Tanasanchai

09:45–10:00 **Atomic Vapor Glass Cell Fabrication for Quantum Experiment**

Speaker

Apiwit Kaewko

10:00–10:15

OBSERVATION OF ZEEMAN SPLITTING IN RUBIDIUM ATOMS USING DOPPLER-FREE SATURATED ABSORPTION SPECTROSCOPY

Speaker

Mr Prin Insang

10:15

11:30

S5 Quantum Technology: Oral presentation 7

Session | Location: RUBY

11:30–11:45

Design and implementation of a laboratory prototype of a fiber-fed Fourier transform spectrograph for the Thai National Telescope

Speaker

Pornapa Artsang

11:45–12:00

Design and analysis of Hollow-core fiber with anti-resonant structure for Ethylene Detection

Speaker

Kwanjira Joonmasa

12:00

13:00

S5 Quantum Technology: Oral presentation 14

Session | Location: RUBY

13:00–13:15

A Study of Unidirectional Gradient of Galactic Cosmic Ray Intensity at Different Cut-off Rigidities and Solar Magnetic Polarities

Speaker

Mr Cherdchai Wuttiya

13:15–13:30

Spectrum of H-atom in Gravitational Waves from Black Hole Binary

Speakers

Mr Nontapat Wanwieng, Dr apimook watcharangkool, Narupon Chattrapiban

13:30–14:00

Towards the Optical Second: The next generation of Thailand Standard Time**Speaker**

Piyaphat Phoonthong

14:00–14:15

Quantum Diamond Spectrometer for Magnetic Field Sensing**Speaker**

Mr Napoom Thooppanom

14:15–14:30

Optically Detected Electron Spin Resonance in Diamond for Vector Magnetometry**Speaker**

Rapeephat Yodsungnoen

14:30–14:45

Performance comparison of Amplitude-decorrelation and Speckle Variance algorithms for OCT Angiography**Speaker**

Wuttikorn Kampong

14:45–15:00

Quantum diffusion map for nonlinear dimensionality reduction**Speaker**

Apimuk Sornsaeng

15:00–15:15

Determination of phase change correction on gauge block measurement in two different interferometric measurement system**Speaker**

Ms Angkoonna Pringkasemchai

16:30