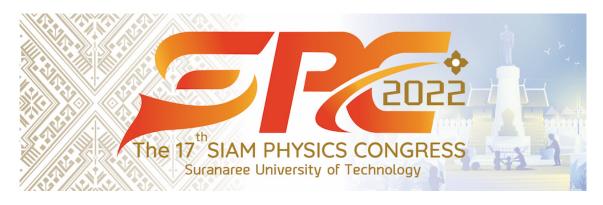
Session Program

22-24 Jun 2022



Siam Physics Congress 2022 (SPC2022)

S4 High Energy and Particle Physics

Thursday 23 June

10:45

S4 High Energy and Particle Physics: Oral presentation 5 **Session** | **Location:** QUARTZ

10:45-11:15

Implications of the Interacting Quark EoS in the Quark Stars with 4D Einstein-**Gauss-Bonnet gravity**

Speaker

Daris Samart

11:15-11:30

SUSY Breaking and R-symmetry Breaking in Gauged Wess-Zumino Model

Speaker

Sirapat Lookrak

11:30-11:45

Memorization and Prediction Capability of Interacting Phase Oscillators

Mr Chanin Kumpeerakij

11:45-12:00

Auroral Initial Brightening and Maximum Poleward Expansion Locations based on POLAR/VIS and POLAR/UVI Observations

Speaker

Suwicha Wannawichian

12:00 10:45

S4 High Energy and Particle Physics: Oral presentation 6 **Session** | **Location**: TOPAZ

10:45-11:00 Phased-resolved energy distribution of pulsar PSRJ1825-0935

Speaker

Nawamin Intrarat

11:00-11:15 The Origin of Maser Flares

Speaker

Malcolm Gray

11:15-11:30

Machine learning application for dark matter - background classification in JUNO experiment

Speaker

Ms Jaruchit Siripak

11:30-11:45 Orion's Magnetic Gems

Speaker

Evgenii Semenko

11:45-12:00

Solar gamma-ray analysis during the latest solar cycle using FERMI-LAT data

Speakers

Daiki Hazama, Jitpanu Arunotai

12:00 15:15

S4 High Energy and Particle Physics: Oral presentation 12 Session | Location: QUARTZ

15:15-15:30

Charmed baryon pair production in effective Lagrangian and Regge approaches

Speaker

Mr Thanat Sangkhakrit

15:30-15:45

Parameters of a potential model for tetraquarks from S- and P-wave charmonium mesons

Speaker

Mr Nattapat Tagsinsit

15:45-16:00 Review of Fluid-Gravity Correspondence

Speaker

Thepprasith Svetatula

16:00-16:15 Search for BSM Higgs bosons using Machine Learning techniques

Speakers

Jinna Waiwattana, Natha Pitakkultorn, Pakorn Saksirimontri

16:15-16:30

Proton Track reconstruction in a Telescope for Proton Computed Tomography

Speaker

Arnon Songmoolnak

16:30

Friday 24 June

09:00

S4 High Energy and Particle Physics: Oral presentation 5 **Session** | **Location:** QUARTZ

09:00-09:30

Highlights of LHC Run-2 and Preparation for Run-3 and High Luminosity LHC

Norraphat SRIMANOBHAS

09:30-09:45

Modification of hadron multiplicity ratios at the chiral phase transition

Thiranat Bumnedpan

09:45-10:00

Non-minimal scalar field coupling to gravity with holographic effect in non flat universe

Speaker

Amornthep Tita

10:00-10:15

The production of charged particles and the kaonic nuclei K-p, K+anti-p in pp collisions at $\sqrt{(s)} = 7$ TeV and K-pp, K+anti-pp in Au + Au collisions at beam energy 130 GeV

Speaker

Natthaphat Thongyoo

10:15 09:00

S4 High Energy and Particle Physics: Oral presentation 6 **Session** | **Location:** TOPAZ

09:00-09:15

\emph{Gaia} Early Data Release 3 peculiar velocity distribution of Galactic highmass x-ray binaries

Speaker

Pornisara Nuchvanichakul

09:15-09:30

Analysis of the gamma-ray halo candidate 3HWC J1928+178 with Fermi-LAT data.

Speaker

Supphakit Wiweko

09:30-09:45 Investigation of Open Cluster NGC 7789 Using GAIA EDR3 Data

Speaker

Ms Princess Tucio

Unveiling Circumstellar Structure of High-mass Protostars via Multiple Species of MASERs in KaVA-LP with EAVN

Speaker

Koichiro SUGIYAMA

10:00-10:15 Searching for dark matter with the Cherenkov Telescope Array.

Speaker

Armelle Jardin-Blicq

10:15 11:30

S4 High Energy and Particle Physics: Oral presenrtation 6 Session | Location: TOPAZ

11:30-11:45

Selection efficiency of galactic-scale outflow at $z \sim 0.1$: Imaging vs Spectroscopy

Speaker

Kantapon Jensangjun

11:45-12:00

Simulating AGN feedback and its evolution in galaxy mergers: case study for NGC 5252

Speaker

Mr Manus Boonmalai

12:00 11:30

S4 High Energy and Particle Physics: Oral presentation 5 Session | Location: QUARTZ

11:30-11:45

Anisotropic flow in Au + Au collision at 1 A GeV by using Quantum Molecular **Dynamics Model**

Speaker

Ms Jiraphat Phusamlee

11:45-12:00

Soliton Solution to Schamel-Korteweg-de Vries Equation with Shooting Method

Speaker

Mr Chainarong Taepanich

12:00

13:00

S4 High Energy and Particle Physics: Oral presentation 12

Session | Location: QUARTZ

13:00-13:30 High Energy Astroparticles from Antarctica

Speaker

Waraporn Nuntiyakul

13:30-13:45

On the effectiveness of relativistic electron Acceleration at geosynchronous orbit during high-intensity, long-duration, continuous AE activity (HILDCAA) during 2015 - 2017

Speaker

Dr Thana Yeeram

13:45-14:00

sine-Gordon expansion method for the kink solion to Oskolkov equation

Speaker

Dr Songvudhi Chimchinda

14:00-14:15

Bianchi Cosmological Model with Quadratic Equation of State

Speaker

Bjorn Jasper Raquel

14:15-14:30 Generalised Uncertainty Relations and the Problem of Dark Energy

Speaker

Mr Matthew J. Lake

14:30-14:45

Geometrical representation of the multi-dimensional consistency: 1-form case

Speaker

Mr Thanadon Kongkoom

14:45-15:00 Tension in rope coiling on a rotating plane

Speaker

Sitichoke Amnuanpol

15:00-15:15

Investigation of perturbation effects on the periastron shifts of stellar orbits around super-massive black hole

Speaker

Mr Bhattaradon Sukon

15:15-15:30 The effect of AGN feedback on shape of dark matter haloes

Speaker

Netipon Naree

15:30-15:45

The potential scientific capabilities of the Evanescent Wave Coronagraph EvWaCo

Matthew Ridsdill-Smith

16:30 13:00

S4 High Energy and Particle Physics: Oral presentation 13 **Session** | **Location:** TOPAZ

13:00-13:10

Earth microlensing zone: how safe is the Earth from long-range detection by other civilisations?

Speaker

Dr Supachai Awiphan

13:15-13:30

The Development of the Astrophysical Laboratory for the Study of Interstellar **Surface Chemistry**

Speaker

Dr Chutipong Suwannajak

13:30-13:45

A Computational Study of the Gas-Phase Formose-Like Reactions under the Interstellar-medium-like conditions

Speaker

pitch wongkummoon

13:45-14:00

Thai National Telescope pointing and tracking: An analysis using secondary data product from science observation

Speakers

Dr Puji Irawati, Supachai Awiphan

14:00-14:15

Discovery of tsunami-like pulsation waves in the very fast rotating A-type stars

Dr David Mkrtichian

14:15-14:30

Mock HI-galaxy catalogs and HI Mass Functions for future large-scale surveys

Speaker

Narenrit Thananusak

14:30-14:45

The Hubble tension problem with variation of the speed of light from Pantheon supernova dataset

Speaker

Teeraparb Chantavat

14:45-15:00

Improving Constraint on Evolution of Galaxies with Large-scale Outflow at z<1.5 with Subaru/Hyper Suprime-Cam Survey

Speaker

Suraphong Yuma

15:00-15:15 Study on halo structure of Helium-6 nuclei

Speaker

Mr Chanatip Yensoung

15:15-15:30

Multi-frequency variabilities: blazar classification and statistical properties

Speaker

Rattanapong Yoyponsan

15:30-15:45

Photometric Variability of High Amplitude Delta Scuti Stars from AAVSO **International Database**

Speaker

Dr Nareemas Chehlaeh

16:30