## **Session Program**

1-6 Aug 2022



# XVth Quark Confinement and the Hadron Spectrum

# Parallels Track A

University of Stavanger, Campus Ullandhaug

## **Monday 1 August**

14:00

#### Parallels Track A: Monday I

Session | Location: UiS, EOJ, Main auditorium where also plenaries are held | Convener: Jeff Greensite

14:00-14:30

Fractionally charged instantons in CP(N-1) spin models and SU(N) gauge theories

Speaker

Robert Pisarski

14:30-15:00

On the mixed 0-form/1-form anomaly in the Hilbert space: pouring new wine into old bottles

Speaker

Andrew Cox

15:00 15:40

#### **Parallels Track A: Monday II**

Session | Location: UiS, EOJ, Main auditorium where also plenaries are held | Convener: Manfried Faber

15:40-16:00 Hadrons, cosmological constant, and type II superconductors

Speaker

Keh-Fei Liu

16:00-16:30 Scalar states of QCD from functional methods

Speaker

Prof. Christian Fischer

16:30-17:00

Semiclassical description of confinement via center vortices and anomaly-preserving  $T^2$  compactifications

Speaker

Yuya Tanizaki

17:00

## **Tuesday 2 August**

14:00

#### Parallels Track A: Tuesday I

Session | Location: UiS, EOJ, Main auditorium where also plenaries are held | Convener: Dmitry Antonov

14:00-14:30

Four-fermi deformations of the massless Schwinger model and confinement

Speaker

Arkady Vainshtein

14:30-15:00

Localisation of Dirac eigenmodes and confinement in gauge theories: the Roberge-Weiss transition

Speaker

Matteo Giordano

15:00 15:40

#### Parallels Track A: Tuesday II

Session | Location: UiS, EOJ, Main auditorium where also plenaries are held | Convener: Jeff Greensite

15:40-16:10 Quarks and triality in a finite volume

Speaker

Lorenz von Smekal

16:10-16:40 The static potential using trial states from Laplacian eigenmodes

Speaker

Roman Höllwieser

16:40-17:00

Non-invertible self-duality defects of Cardy-Rabinovici model and mixed gravitational anomaly

Speaker

Yui Hayashi

17:00

## **Thursday 4 August**

14:00

#### Parallels Track A: Thursday I

Session | Location: UiS, EOJ, Main auditorium where also plenaries are held | Convener: Manfried Faber

14:00-14:30

Excitations of "elementary" particles in superconductors and other gauge Higgs theories

Speaker

Jeff Greensite

14.30-13

14:30-15:00 Instanton gas approximation for the Hubbard model

**Speaker** 

Dr Maksim Ulybyshev

15:00 15:40

#### Parallels Track A: Thursday II

Session | Location: UiS, EOJ, Main auditorium where also plenaries are held | Convener: Jeff Greensite

15:40-16:00 Curci-Ferrari model for describing infrared QCD

Speaker

Marcela Peláez

16:00-16:20

Study of hadron masses with Faddeev-Popov eigenmode projection in the Coulomb gauge

Speaker

Mr Hiroki Ohata

16:20-16:40

Phase structure of pure Yang-Mills theory in an anisotropic system: A new extreme condition of QCD

Speaker

Daiki Suenaga

16:40-17:00

The influence of the Casimir effect on the vacuum structure of 3+1 dimentional compact electrodynamics

Speaker

Aleksei Tanashkin

17:00 15:40

#### **Parallels Track A: Thursday III**

**Session** | **Location:** UiS, AR G-202, On the first floor above the ground floor in the AR building | **Convener:** Dmitry Antonov

16:00-16:20

Lattice study of the trace anomaly contributions to the glueball masses

Speaker

Keita Sakai

16:20-16:40 Effective quarks and gluons in QCD

**Speaker** Maria Gómez-Rocha

16:40-17:00 Path integral study of the Casimir effect in a chiral medium

Speaker

Thomas Oosthuyse

## **Friday 5 August**

14:00 Parallels Track A: Friday I Session | Location: UiS, EOJ | Convener: robert pisarski 14:00-14:30 Calorons, monopoles and stable, charged solitons Speaker Manfried Faber 14:30-15:00 Field, current, and charge distribution in a pure gauge SU(3) flux tube Speaker Volodymyr Chelnokov 15:00 15:40 Parallels Track A: Friday II Session | Location: UiS, EOJ | Convener: Manfried Faber 15:40-16:00 Topological objects and the local Polyakov loop Speaker Rasmus Larsen 16:00-16:20 London model of dual color superconductor Speaker Dr Jiri Hosek 16:20-16:40 Studying the Chiral Magnetic Effect in Pb+Pb and Xe+Xe collisions using the AVFD model with ALICE Speaker Shi Qiu 17:00 15:40 **Parallels Track A: Friday III** Session | Location: UiS, AR G-202, On the first floor above the ground floor in the AR building | Convener: **Dmitry Antonov** 16:00-16:20 Energy-momentum tensor around a soliton in 1+1 dimensional \$\phi^4\$ model and its regularization Speaker Hiroaki Ito Position-space gluon propagator: positivity violation and gluon mass generation. Speaker Feliciano de Soto Borrero 16:40-17:00

pure gauge theory

Compact QED: the photon propagator, confinement and positivity violation for the

17:00