# **Session Program**

2-8 Nov 2025



# 42nd International Symposium on Lattice Field Theory (Lattice 2025)

# Hadronic and nuclear spectrum and interactions

TIFR Mumbai, Homi Bhabha Auditorium Tata Institute of Fundamental Research, 1, Homi Bhabha Road, Navy Nagar, Colaba, Mumbai, India. Pin -400 005

## **Monday 3 November**

14:30

#### Hadronic and nuclear spectrum and interactions

Session | Location: AG66 | Convener: Urs Heller

14:30-14:50

Precisely determining the ground state mass of Spin-3/2 \$\Omega\_{ccc}\$ baryon from Lattice QCD

Speaker

Navdeep Singh Dhindsa

14:50-15:10 Studying heavy hadrons with relativistic quarks

**Speaker** 

Archana Radhakrishnan

15:10-15:30 Precision charmonium spectroscopy on CLS ensembles: an update

Speaker

Gunnar Bali

15:30-15:50

Heavy hadron spectrum from 2+1+1 flavor MILC lattices

Speaker

Sabiar Shaikh

15:50-16:10

Mixing of light meson and charmonium flavor singlets in  $N_f = 3 + 1$  QCD

Speaker

Juan Andres Urrea Nino

16:10 16:40

# Hadronic and nuclear spectrum and interactions

Session | Location: AG66 | Convener: Maxim Mai

16:40-17:00

Charm tetraquarks investigation using CLS lattices

Speaker

M. Padmanath

17:00-17:20 Lattice study of ccus tetraquark channel in D(\*)Ds(\*) scattering

Speaker

Tanishk Shrimal

17:20-17:40

Importance of local tetraquark operators for the \$T\_{cc}(3875)^+\$ spectrum

Speaker

**Andres Stump** 

17:40-18:00 **\$T\_{cc}\$ pole trajectory** 

Speaker

Protick Mohanta



# Lattice QCD Investigation of Doubly Bottom and Bottom-Strange Tetraquarks in the Isoscalar Channel

#### Speaker

Bhabani Sankar Tripathy

## **Tuesday 4 November**

14:50

#### Hadronic and nuclear spectrum and interactions

**Session** | **Location**: AG66 | **Convener**: Felix Benjamin Erben

14:50-15:10

Nucleon to Delta(1232) Resonance Transition Form Factors from Lattice QCD

Srijit Paul

15:10-15:30

Towards the time-like pion form factor beyond the elastic regime using domainwall QCD

Speaker

Gabriele Morandi

15:30-15:50

Two-pion scattering amplitude from Lattice QCD using staggered fermions

Adeilton Dean Marques Valois

16:10

16:40

#### Hadronic and nuclear spectrum and interactions

Session | Location: AG66 | Convener: Fernando Romero López

16:40-17:00 Two-particle matrix elements in a box

Speaker

Felipe Ortega Gama

17:00-17:20

Bayesian Analysis and Analytic Continuation of Scattering Amplitudes from **Lattice QCD** 

Speaker

Miguel Salg

17:20-17:40 Towards four-pion effects in multi-hadron decays

Speaker

Rajnandini Mukherjee

# **Wednesday 5 November**

10:50

#### Hadronic and nuclear spectrum and interactions

Session | Location: Homi Bhabha Auditorium Annex | Convener: Srijit Paul

10:50-11:10

Electromagnetic form factors and structure of the \$T\_{bb}\$ tetraquark

Ivan Vujmilovic

11:10-11:30 Born--Oppenheimer Effective Theory for multiquark states

Speaker

Abhishek Mohapatra

11:30-11:50

Adjoint meson and tetraquark static energies using novel BOEFT interpolators

Speaker

Sipaz Sharma

# **Thursday 6 November**

14:30

#### Hadronic and nuclear spectrum and interactions

**Session** | **Location:** AG66 | **Convener:** Jeremy Green

14:30-14:50

Lattice QCD study on kaon-nucleon interactions and \$\Theta^+\$ pentaquark on the physical point

Speaker

Kotaro Murakami

14:50-15:10 The \$\Lambda(1405)\$ at the \$SU(3)\$ point in lattcice QCD

Speaker

Javier Suarez Sucunza

15:10-15:30 A curious case of a strangeness resonance -- lattice and experiment

Speaker

Maxim Mai

15:30-15:50

Negative parity hyperons from coupled channel scattering

Speaker

Fernando Alvarado

15:50-16:10 Baryon masses with C-periodic boundary conditions

Speaker

Sara Rosso

16:10-16:30

Dbar-N interaction from Lattice QCD at the physical point

Speaker

Rento Yamada

## Friday 7 November

14:30

#### Hadronic and nuclear spectrum and interactions

Session | Location: AG66 | Convener: Amy Nicholson

14:30-14:50

Physical-point lattice QCD study of baryon-baryon interactions in the S = -1 channel

Speaker

Koichi Murase

14:50-15:10

Preliminary study of the \$H\$ dibaryon in \$N\_f=2+1\$ lattice QCD

Speaker

Davide Laudicina

15:10-15:30

Systematic uncertainties in lattice QCD calculations of multi-hadron systems

**Speaker** 

Robert Perry

15:30-15:50 Investigating Quark Mass Dependence of Nuclear Binding

Speaker

Debsubhra Chakraborty

15:50-16:10 Quark mass dependence of the nuclear LS force

Speaker

Takuya Sugiura

16:10 16:40

# Hadronic and nuclear spectrum and interactions

Session | Location: AG66 | Convener: Robert Perry

16:40-17:00 QCD Predictions for Physical Multimeson Scattering Amplitudes

Speaker

Fernando Romero López

17:00-17:20 Three-body study of the \$T\_{cc}^+\$ from lattice QCD

Speaker

Andre Baiao Raposo

17:20-17:40

Extending the finite volume formalism to the \$N\pi\pi\$ system at maximal isospin

Speaker

Stephen Sharpe

17:40-18:00 Emergence of the pi(1300) Resonance from Lattice QCD

Speaker

Maxim Mai



The structure of the lightest positive-parity charmed mesons from LQCD

#### Speaker

Eric Gregory