

Session Program

4-6 Sept 2025

Hot QCD Matter 2025 (Series 3)

Plenary Session

Lecture Hall Complex, IIT Bhilai, L106
Department of Physics, IIT Bhilai, Kutelabhata, Durg, Chattisgarh 491002

Thursday 4 September

10:30

Plenary Session: Plenary Session 1

Session |

Location: Lecture Hall Complex, IIT Bhilai, L106, Department of Physics, IIT Bhilai, Kutelabhata, Durg, Chattisgarh 491002 |

Convener: Hiranmaya Mishra

10:35-10:55

Polarization and magnetic field in heavy ion collisions

Speaker

Amaresh Jaiswal

10:55

11:30

Plenary Session: Plenary Session 2

Session |

Location: Lecture Hall Complex, IIT Bhilai, L106, Department of Physics, IIT Bhilai, Kutelabhata, Durg, Chattisgarh 491002 |

Convener: Abhijit Bhattacharyya

11:30-11:50

Construction of the Facility for Antiproton and Ion Research (FAIR) in Germany and Indian contribution

Speaker

Dr Saikat Biswas

11:50-12:10

In-medium jet modification in Quark Gluon Plasma produced in heavy-ion collisions at RHIC

Speaker

Nihar Ranjan Sahoo

12:10-12:30

Di-muon measurements with CBM experiment at FAIR

Speaker

Dr Partha Pratim Bhaduri

12:30-12:50

Nuclei formation in pp and heavy-ion collisions at the LHC: Insight into the production mechanisms using novel tools

Speaker

Sushanta Tripathy

12:50

Friday 5 September

09:30

Plenary Session: Plenary Session 3

Session |

Location: Lecture Hall Complex, IIT Bhilai, L106, Department of Physics, IIT Bhilai, Kutelabhata, Durg, Chattisgarh 491002 |

Convener: Gautam Gangopadhyay

09:30–09:50

Properties of strange mesons in dense resonance matter

Speaker

Arvind Kumar

09:50–10:10

Phenomenological investigation of conventional and non-conventional hadrons

Speaker

Dr Ajay Kumar Rai

10:10–10:30

Transition magnetic moments of the baryons in hot and dense matter

Speaker

Dr Suneel Dutt

10:50

11:30

Plenary Session: Plenary Session 4

Session |

Location: Lecture Hall Complex, IIT Bhilai, L106, Department of Physics, IIT Bhilai, Kutelabhata, Durg, Chattisgarh 491002 |

Convener: Vinod Chandra

11:30–11:50

Exploring the origin of collective phenomena in small collision systems at the LHC

Speaker

Prof. Debojit Sarkar

11:50–12:10

Measurement of light (anti)nuclei production in jets with ALICE

Speaker

Dr ARVIND KHUNTIA

12:10–12:30

Quarkonia production in Run 3 using ALICE at the LHC

Speaker

Dr Dhananjaya Thakur

12:30–12:50

Signatures of local acceleration of quark-gluon plasma in the dilepton production

Speaker

Aritra Bandyopadhyay

12:50

Saturday 6 September

09:30

Plenary Session: Plenary Session 5

Session |

Location: Lecture Hall Complex, IIT Bhilai, L106, Department of Physics, IIT Bhilai, Kutelabhata, Durg, Chattisgarh 491002 |

Convener: Dr Saikat Biswas

09:30–09:50

2-D mode expansion of the transverse phase space

Speaker

Sandeep Chatterjee

09:50–10:10

Exploring Radial and Directed Flow as Probes of QGP Properties Across Energies

Speaker

Mr Tribhuban Parida

10:10–10:30

Radial flow via $v_0(p_{\mathrm{T}})$ in heavy-ion collisions at LHC energies

Speaker

Ms Swati Saha

10:30–10:50

Simulations of stochastic fluid dynamics near a critical point

Speaker

Chandroday Chattopadhyay

10:50

11:30

Plenary Session: Plenary Session 6

Session |

Location: Lecture Hall Complex, IIT Bhilai, L106, Department of Physics, IIT Bhilai, Kutelabhata, Durg, Chattisgarh 491002 |

Convener: Dr Partha Pratim Bhaduri

11:50–12:10

Experimental overview of jet measurements at LHC

Speaker

Dr Sidharth Kumar Prasad

12:10–12:30

Experimental overview of light-nuclei production in high energy collisions

Speaker

Mr Rishabh Sharma

12:30–12:50

Probing light-flavour particle production in small collision system through event topology with ALICE

Speaker

Dr Rutuparna Rath

12:50

14:40

Plenary Session: Plenary Session 7**Session** |**Location:** Lecture Hall Complex, IIT Bhilai, L106, Department of Physics, IIT Bhilai, Kutelabhata, Durg, Chattisgarh 491002 |**Convener:** Prabhakar Palni

14:40-15:00

Aspects of spin hydrodynamic frameworks in QCD medium**Speaker**

ARPAN DAS

15:00-15:20

The spectra and the anisotropic flow of dileptons from a magnetized QCD matter**Speaker**

Ankit Kumar Panda

15:20-15:40

Wigner Distribution and Orbital Angular Momentum of Quarks**Speaker**

Dr Vikash Kumar Ojha

15:40-16:00

Thermodynamics of strongly magnetized dense quark matter from hard dense loop perturbation theory**Speaker**

Mr Sarthak Satapathy

16:00-16:20

Can Charmonium be a Probe for QGP in Small Collision Systems?**Speaker**

Mr Captain Rituraj Singh

16:20

16:45

Plenary Session: Plenary Session 8**Session** |**Location:** Lecture Hall Complex, IIT Bhilai, L106, Department of Physics, IIT Bhilai, Kutelabhata, Durg, Chattisgarh 491002 |**Convener:** Santosh Kumar Das

17:05-17:25

Quarkonium and Thermodynamical Properties in a Baryon-Rich Anisotropic Medium of QGP**Speaker**

Dr Vineet Kumar Agotiya

17:25