

International workshop on
Physics with Recoil Separators
(PRS-26)

Inter-University Accelerator Centre, New Delhi

July 13 – 14, 2026

Programme

Monday, July 13, 2026

08:30 – 09:15 Registration

09:15 – 09:30 *Avinash Chandra Pandey* Director, IUAC, New Delhi, India
Opening Remarks

Session I: Chair - N. Madhavan

09:30 – 10:00 *Subir Nath* Nuclear Physics Group, IUAC, New Delhi, India
Recoil separators at IUAC: Status and plans

10:00 – 10:30 *Aradhana Shrivastava* Nuclear Physics Division, Bhabha Atomic Research centre, Mumbai, India
Role of nuclear structure on reaction dynamics with stable and weakly bound stable nuclei

10:30 – 11:00 *Dhruba Gupta* Department of Physical Sciences, Bose Institute, Kolkata, India
Transfer and breakup reactions with ^7Be

11:00 – 11:30 Tea / coffee break

Session II: Chair - A. M. Vinodkumar

11:30 – 12:00 *Bivash Ranjan Behera* Department of Physics, Panjab University, Chandigarh, India
Few physics possibilities with the recoil separators at IUAC

12:00 – 12:30 *Moumita Maiti* Department of Physics, Indian Institute of Technology Roorkee, Roorkee, India
Exploration of near and sub-barrier fusion phenomena with $^{28,30}\text{Si}$ -induced reactions in medium mass targets

12:30 – 13:00 *E. Prasad* Department of Physics, Central University of Kerala, Kasaragod, India
Fusion dynamics in reactions forming medium heavy to heavy nuclei: Insights from the evaporation residue studies

13:00 – 14:15 Lunch break

Session III: Chair - Aradhana Shrivastava

- 14:15 – 14:45 *Lorenzo Corradi* (**ONLINE**) *Laboratori Nazionali di Legnaro, Legnaro, Italy*
Nucleon-nucleon correlation effects studied in near and sub-barrier transfer reactions
- 14:45 – 15:15 *Sophia Heinz* (**ONLINE**) *GSI Helmholtz Center, Darmstadt, Germany*
The SHIP velocity filter at GSI: How to catch a single nucleus
- 15:15 – 15:45 *H. M. Devaraja* (**ONLINE**) *Flerov Laboratory of Nuclear Reactions, JINR, Dubna, Russia*
In-flight separation and investigation of heavy multinucleon transfer products using the kinematic separator SHELS
- 15:45 – 16:15 Tea / coffee break**

Session IV: Chair - Bivash Ranjan Behera

- 16:15 – 16:45 *Jagdish Gehlot* *Nuclear Physics Group, IUAC, New Delhi, India*
Investigation of fusion suppression in $^{16}\text{O}+^{203,205}\text{Tl}$ systems via ER-gated spin distributions
- 16:45 – 17:15 *Gonika* *Nuclear Physics Group, IUAC, New Delhi, India*
Coupled reaction channel analyses of single- and two-nucleon transfer in $^{40}\text{Ca}+^{96}\text{Zr}$ and $^{116}\text{Sn}+^{60}\text{Ni}$ systems
- 17:15 – 17:45 *Chandra Kumar* (**ONLINE**) *Department of Physics, Institute of Science Tokyo, Japan*
From fusion barriers to nuclear shapes: Constraining nuclear deformation
- 17:45 Evening snacks**

Tuesday, July 14, 2026

Session V: Chair - Dhruba Gupta

- 09:30 – 10:00 *Jennifer Pore* (**ONLINE**) *Nuclear Science Division, LBNL, Berkeley, California, USA*
Leveraging recoil separators for chemical studies of superheavy elements
- 10:00 – 10:30 *Charles M. Folden III* (**ONLINE**) *Cyclotron Institute, Texas A&M University, Texas, USA*
Heavy element research with the AGGIE gas-filled separator at Texas A&M University
- 10:30 – 11:00 *Fernando Montes* (**ONLINE**) *FRIB, Michigan State University, East Lansing, Michigan, USA*
Direct measurements of capture reactions with SECAR at FRIB
- 11:00 – 11:30 Tea / coffee break**

Session VI: Chair - Rajesh Pratap Singh

- 11:30 – 12:00 *Gopal Mukherjee* Physics Group, Variable Energy Cyclotron Centre, Kolkata, India
Exploring nuclear structure physics with recoil separators: Why and how
- 12:00 – 12:30 *Juha. Usitalo* (**ONLINE**) Department of Physics, JYFL-ACCLAB, University of Jyväskylä, Finland
RITU and MARA, three decades of nuclear spectroscopy at JYFL-ACCLAB
- 12:30 – 13:00 *A. Isaev* (**ONLINE**) Flerov Laboratory of Nuclear Reactions, JINR, Dubna, Russia
Prompt neutron emission from spontaneous fission of superheavy elements using SHELS and GRAND recoil separators
- 13:00 – 14:15 Lunch break**

Session VII: Chair - Gopal Mukherjee

- 14:15 – 14:45 *A. M. Vinodkumar* Department of Physics, Calicut University, Calicut, India
Sub-barrier fusion enhancement and the role of hexadecapole deformation in the $^{16}\text{O}+^{170,172,174,176}\text{Yb}$ reactions
- 14:45 – 15:15 *G. Montagnoli* (**ONLINE**) Department of Physics & Astronomy, University of Padova, Padova, Italy
Investigating fusion hindrance in medium-light systems: A pathway to understanding astrophysical processes
- 15:15 – 15:45 *I. Mazumdar* Dept. of Nucl. & Atomic Physics, Tata Institute of Fundamental research, Mumbai, India
Probing nuclear collective motion at finite temperature and angular momentum: The fusion-fission route
- 15:45 – 16:15 Tea / coffee break**

Session VIII: Chair - Indranil Mazumdar

- 16:15 – 16:45 *T. Cap* (**ONLINE**) National Centre for Nuclear Research, Warsaw, Poland
Probing the fusion probability with gamma-ray multiplicities
- 16:45 – 17:15 *Anagha Chakraborty* Department of Physics, Visva-Bharati, Santiniketan, India
Investigation of nuclear level structure and reaction dynamics using Nd-isotopes
- 17:15 – 17:45 *Neeraj Kumar* (**ONLINE**) Norwegian Nuclear Research Center, University of Oslo, Oslo, Norway
Isotopic mapping of the fission γ -bump: New insights from PARIS@VAMOS
- 17:45 Evening snacks**