

## **Session Program**

**9-14 Nov 2025**

# **Origin of Elements & Cosmic Evolution 2025**

## ***Talks***

Peng Huanwu Collaborative Center for Research and Education, BUAA, 6th floor meeting room  
Baiyan Bldg, North 4th Ring Road Middle, No. 238, Beijing, China

# Thursday 13 November

08:40

## Talks: Galactic Chemical Evolution

**Session** |

**Location:** Peng Huanwu Collaborative Center for Research and Education, BUAA, 6th floor meeting room, Baiyan Bldg, North 4th Ring Road Middle, No. 238, Beijing, China

08:40–09:10

### Ejecta from nucleosynthesis events and their flows

**Speaker**

Roland Diehl

09:10–09:40

### The r-process elements enhanced stars with Galactic disk origins

**Speaker**

Hongliang Yan

09:40–10:00

### Imprints of Galactic Environments on Chemical Evolution

**Speaker**

Eda Gjergo

10:00–10:30

### Galactic chemical evolution in 3D

**Speaker**

Nicholas Storm

10:30–10:45

### Modelling the Galactic Chemical Evolution of Dwarf Galaxies IC 10 and IC 1613: Unique r-Process Laboratories?

**Speaker**

GURUPRASAD YAGADEVAN

10:45

11:10

## Talks: Compact Objects I

**Session** |

**Location:** Peng Huanwu Collaborative Center for Research and Education, BUAA, 6th floor meeting room, Baiyan Bldg, North 4th Ring Road Middle, No. 238, Beijing, China

11:10–11:40

### Self-bound hybrid stars with strong phase transitions can relieve major compact star observation tensions

**Speaker**

Chen Zhang

11:40–12:10

### Neutron stars as probes of dense QCD matter

**Speaker**

Sophia Han

12:10–12:25

### Symmetry energy effect on rotating neutron stars

**Speaker**

Xuhao Wu

12:25–12:40

**Nova brevis from magnetar giant flares: a new window on neutron star crusts****Speaker**

Jiahang Zhong

12:40

14:00

**Talks: Neutrino Physics****Session** |**Location:** Peng Huanwu Collaborative Center for Research and Education, BUAA, 6th floor meeting room, Baiyan Bldg, North 4th Ring Road Middle, No. 238, Beijing, China

14:00–14:30

**Neutrino Scattering in Nuclear Physics****Speaker**

Myun-ki Cheoun

14:30–14:50

**On the Energetic Role of Forward Neutrino Scattering in CCSN Models****Speaker**

Tatsushi Shima

14:50–15:10

**Proton-rich production of lanthanides: the  $\nu$ i process****Speaker**

Xilu Wang

15:10–15:25

**Contribution of Kilonovae to diffuse MeV Gamma-ray background****Speaker**

PRANTIK SARMAH

15:25–15:40

**Nuclear de-excitation lines as a probe of low-energy cosmic rays****Speaker**

Bing Liu

15:40

16:00

**Talks: Stellar Abundance & Ages****Session** |**Location:** Peng Huanwu Collaborative Center for Research and Education, BUAA, 6th floor meeting room, Baiyan Bldg, North 4th Ring Road Middle, No. 238, Beijing, China

16:00–16:30

**Lithium in the cosmos: old and rare and fragile****Speaker**

Andreas Korn

16:30–16:50

**Stellar Atmospheric Parameters and Elemental Abundances from LAMOST Low-resolution Spectra with DD-PAYNE (Online)****Speaker**

Meng Zhang

16:50–17:10

**One Element, Two Tracks: Age-Resolved Phosphorus Variation in the Young side of Milky Way (Online)**

**Speaker**

Mingjie Jian

17:10–17:30

**Asteroseismology can give good ages for stars**

**Speaker**

Tanda Li

17:30–17:45

**Chemo-chronology of the metal-poor Milky Way halo via asteroseismology**

**Speaker**

Chenxi Wang

17:45

# Friday 14 November

08:30

## Talks: Neutron-capture Astrophysics

**Session** |

**Location:** Peng Huanwu Collaborative Center for Research and Education, BUAA, 6th floor meeting room, Baiyan Bldg, North 4th Ring Road Middle, No. 238, Beijing, China

08:30–08:50 **TBD**

**Speaker**

Siwei Zou

08:50–09:20

**Neutron-capture in the wild: Constraining r-process nucleosynthesis through metal-poor stars in the Milky Way (Online)**

**Speaker**

Vinicius M Placco

09:20–09:35

**Constraining r-process sites : [Th/Eu] in moderately metal-poor stars**

**Speaker**

Kurumi Furutsuka

09:35–09:55

**Measurement of neutron capture cross section and its implication for astrophysics**

**Speaker**

Suyalatu Zhang

09:55

10:15

## Talks: Nuclear Structure

**Session** |

**Location:** Peng Huanwu Collaborative Center for Research and Education, BUAA, 6th floor meeting room, Baiyan Bldg, North 4th Ring Road Middle, No. 238, Beijing, China

10:15–10:45

**Nuclear Structure and Dynamics from Stable Nuclei to Stellar Environments**

**Speaker**

Nils Paar

10:45–11:15

**Perspective on cosmos p-nuclei studies with the SLEGS gamma-ray source**

**Speaker**

Prof. Jianjun HE

11:15–11:45

**Toward astrophysics-driven nuclear-reaction experiments for Supernova nucleosynthesis**

**Speaker**

Nobuya Nishimura

11:45

13:00

## Talks: Compact Objects II

**Session** |

**Location:** Peng Huanwu Collaborative Center for Research and Education, BUAA, 6th floor meeting room, Baiyan Bldg, North 4th Ring Road Middle, No. 238, Beijing, China

13:00–13:30

### Clocked X-ray Bursters and New Aspects

**Speaker**

Akira Dohi

13:30–13:45

### Indications of a Nuclear Urca Mechanism in the X-ray Superburst MAXI J1752–457

**Speaker**

Hao Huang

13:45–14:15

### Properties of Quark Star Merger Ejecta and the Observational Signature

**Speaker**

Zhiqiang Miao

14:15

14:35

## Talks: Nuclear Reactions & Experiments I

**Session** |

**Location:** Peng Huanwu Collaborative Center for Research and Education, BUAA, 6th floor meeting room, Baiyan Bldg, North 4th Ring Road Middle, No. 238, Beijing, China

14:35–15:05

### Effects of beyond mean field approximation and tensor forces on Gamow-Teller and $\beta$ decay of magic nuclei

**Speaker**

Hiroyuki Sagawa

15:05–15:25

### Supernova neutrino and JUNO

**Speaker**

Yufeng Li

15:25–15:45

### Large neutron-to-proton conversion in light nuclear reactions at relativistic energies

**Speaker**

Baohua Sun

15:45

16:05

## Talks: Nuclear Reactions & Experiments II

**Session** |

**Location:** Peng Huanwu Collaborative Center for Research and Education, BUAA, 6th floor meeting room, Baiyan Bldg, North 4th Ring Road Middle, No. 238, Beijing, China

16:05–16:35

### Nuclear weak rates for astrophysics based on the shell-model approach

**Speaker**

Toshio Suzuki

16:35–17:05

**Nuclear reactions for nuclear astrophysics and effective field theories****Speaker**

Shung-Ichi Ando

17:05–17:25

**Recent Studies on r-process Nuclear Cosmochronology****Speaker**

Xinhui Wu

17:25–17:45

**Charge-exchange reactions and the applications****Speaker**

Bingshui Gao

18:05