

# NIC XVII school 2023



## Report of Contributions

Contribution ID: 1

Type: **not specified**

## Opening

*Monday, 11 September 2023 09:00 (30 minutes)*

**Presenter:** HAHN, Insik (Center for Exotic Nuclear Studies, IBS)

Contribution ID: 2

Type: **not specified**

## **Lecture#1 Nuclear data and Computational Infrastructure for Nuclear Astrophysics**

*Monday, 11 September 2023 09:30 (1h 30m)*

Nuclear data and Computational Infrastructure for Nuclear Astrophysics

Link:

[https://nucastrodata.org/NIC\\_School/resources.html](https://nucastrodata.org/NIC_School/resources.html)

**Presenter:** SMITH, Michael S. (Oak Ridge National University)

Contribution ID: 3

Type: **not specified**

## Lecture#1 Tutorial

*Monday, 11 September 2023 11:00 (1 hour)*

Link:

[https://nucastrodata.org/NIC\\_School/resources.html](https://nucastrodata.org/NIC_School/resources.html)

**Presenter:** SMITH, Michael S. (Oak Ridge National University)

Contribution ID: 4

Type: **not specified**

## **Lecture #2 Experimental nuclear astrophysics (RI beam experiments)**

*Monday, 11 September 2023 13:30 (1h 30m)*

Experimental nuclear astrophysics (RI beam experiments)

**Presenter:** PAIN, Steve D. (Oak Ridge National Laboratory)

Contribution ID: 5

Type: **not specified**

## **Lecture #2 Tutorial Nuclear Physics simulations using Geant4/NPtools**

*Monday, 11 September 2023 15:20 (1h 40m)*

Nuclear Physics simulations using Geant4/NPtools

**Presenter:** HWANG, Jongwon (Center for Exotic Nuclear Studies, Institute for Basic Science)

Contribution ID: 6

Type: **not specified**

## Coffee Break and Group Making

*Monday, 11 September 2023 17:00 (50 minutes)*

Contribution ID: 7

Type: **not specified**

## **Lecture #3 (Online) Nucleosynthesis and reaction networks**

*Tuesday, 12 September 2023 09:30 (1h 30m)*

Nucleosynthesis and reaction networks

**Presenter:** MUMPOWER, Matthew (Los Alamos National Laboratory (LANL))

Contribution ID: 8

Type: **not specified**

## Lecture #3 Tutorial

*Tuesday, 12 September 2023 11:00 (1 hour)*

Lecture #3 tutorial

Google Drive Link:

[https://drive.google.com/drive/folders/1jB4GBst2AePaouFgLtUlJM3rawiaaCbc?usp=drive\\_link](https://drive.google.com/drive/folders/1jB4GBst2AePaouFgLtUlJM3rawiaaCbc?usp=drive_link)

**Presenter:** HOLMBECK, Erika (Carnegie Observatory)

Contribution ID: 9

Type: **not specified**

## **Lecture #4 Observations, chemical abundances in stars**

*Tuesday, 12 September 2023 13:30 (1h 30m)*

Observations, chemical abundances in stars

**Presenter:** AOKI, Wako (National Astronomical Observatory of Japan)

Contribution ID: **10**

Type: **not specified**

## Group Activities / Q&A

*Tuesday, 12 September 2023 15:50 (2 hours)*

Group Activities / Q&A

Contribution ID: **11**

Type: **not specified**

## **Lecture #3**

TBA

Contribution ID: **12**

Type: **not specified**

## **Lecture #3**

TBA

Contribution ID: 13

Type: **not specified**

## **Lecture #5 Experimental nuclear astrophysics (stable beam experiments and underground)**

*Wednesday, 13 September 2023 09:00 (1h 20m)*

Experimental nuclear astrophysics (stable beam experiments and underground)

**Presenter:** TANG, Xiaodong (Institute of Modern Physics, Chinese Academy of Sciences)

Contribution ID: 14

Type: **not specified**

## **Lecture #6 Observation of neutron star merger or kilonova**

*Wednesday, 13 September 2023 10:40 (1h 20m)*

Observation of neutron star merger or kilonova

**Presenter:** HOLMBECK, Erika (Carnegie Observatory)

Contribution ID: 15

Type: **not specified**

## **Lecture #7 (Online) Nuclear matter, equation of state, High-density matter**

*Wednesday, 13 September 2023 16:30 (1h 20m)*

(Online) Nuclear matter, equation of state, High-density matter

**Presenter:** HUGUET, Arnau Rios (University of Barcelona)

Contribution ID: **16**

Type: **not specified**

## **Group Activities / Q&A**

*Wednesday, 13 September 2023 13:30 (2h 30m)*

Contribution ID: 17

Type: **not specified**

## **Lecture #8 Stellar modelling of massive stars**

*Thursday, 14 September 2023 09:00 (1h 20m)*

Stellar modelling of massive stars

**Presenter:** YOON, Sung-Chul (Seoul National University)

Contribution ID: **18**

Type: **not specified**

## **Lecture #9 Detection of Gravitational Waves and Astrophysics with Gravitational Waves**

*Thursday, 14 September 2023 10:40 (1h 20m)*

Detection of Gravitational Waves and Astrophysics with Gravitational Waves

**Presenter:** SON, Edwin J. (National Institute for Mathematical Sciences)

Contribution ID: **19**

Type: **not specified**

## **Lecture #10 Nuclear physics theories to calculate nuclear properties important for Astrophysics**

*Thursday, 14 September 2023 13:30 (1h 30m)*

Nuclear physics theories to calculate nuclear properties important for Astrophysics

**Presenter:** KAJINO, Toshitaka (Beihang University)

Contribution ID: **20**

Type: **not specified**

## Group Activities / Q&A

*Thursday, 14 September 2023 15:20 (2h 30m)*

TBA

Contribution ID: 21

Type: **not specified**

## **Student presentation for Group Activites**

*Friday, 15 September 2023 09:00 (2 hours)*

Contribution ID: 22

Type: **not specified**

## Closing

*Friday, 15 September 2023 11:00 (1 hour)*

**Presenter:** SMITH, Michael S. (Oak Ridge National University)

Contribution ID: 23

Type: **not specified**

## Nuclear Astrophysics activities in Korea

*Tuesday, 12 September 2023 15:20 (30 minutes)*

Nuclear Astrophysics activities in Korea

**Presenter:** Dr AHN, Sunghoon(Tony) (Center for Exotic Nuclear Studies, Institute for Basic Science)