ChETEC-INFRA SNAQs [snacks]

Schools on Nuclear Astrophysics Questions

Question in February 2022

How to model a star in your laptop?

This project has received funding from the European Union's Horizon 2020 research and innovation programme under grant agreement No 101008324 (ChETEC-INFRA).

Timetable (14:00 to 17:30 CET, 09:00 to 12:30 EST)

14:00 – 14:05	Welcome and Introduction **Konrad Schmidt**, *Helmholtz-Zentrum Dresden-Rossendorf, Germany*
14:05 – 14:50	**Structure and equilibrium of normal stars** **Maurizio Busso**, *University of Perugia, Italy*
15:00 – 15:45	**How to make elements in my computer** **Marco Pignatari**, *Konkoly Observatory, Hungary*
15:55 – 16:15	Coffee break and breakout session
16:15 – 16:25	**Nuclear Physics in Astrophysics X (NPAX) conference and school** **Alberto Mengoni**, *ENEA Bologna and INFN Sezione di Bologna, Italy and CERN, Switzerland*
16:25 – 16:40	**3D hydrodynamics simulations of massive stars with the PROMPI code** **Federico Rizzuti**, *Keele University, United Kingdom*
16:45 – 17:00	**Direct measurement of the $^{19}F(p,\alpha)^{16}O$ reaction** **Teodora Andreea Madgearu**, *Extreme Light Infrastructure, Romania*
17:05	Round table discussion

Guidelines for participants of SNAQs

Please, …

- … rename yourself in the Zoom sessions to match your registration name and institution – this will serve as your “nametag”.

- … mute your microphone during talks.

- … use the public chat only for questions related to the lecture; for discussions, please use the private chat.

- … write your questions in the chat – due to the high number of participants, a moderator will read a selection of questions but can choose a limited number only.

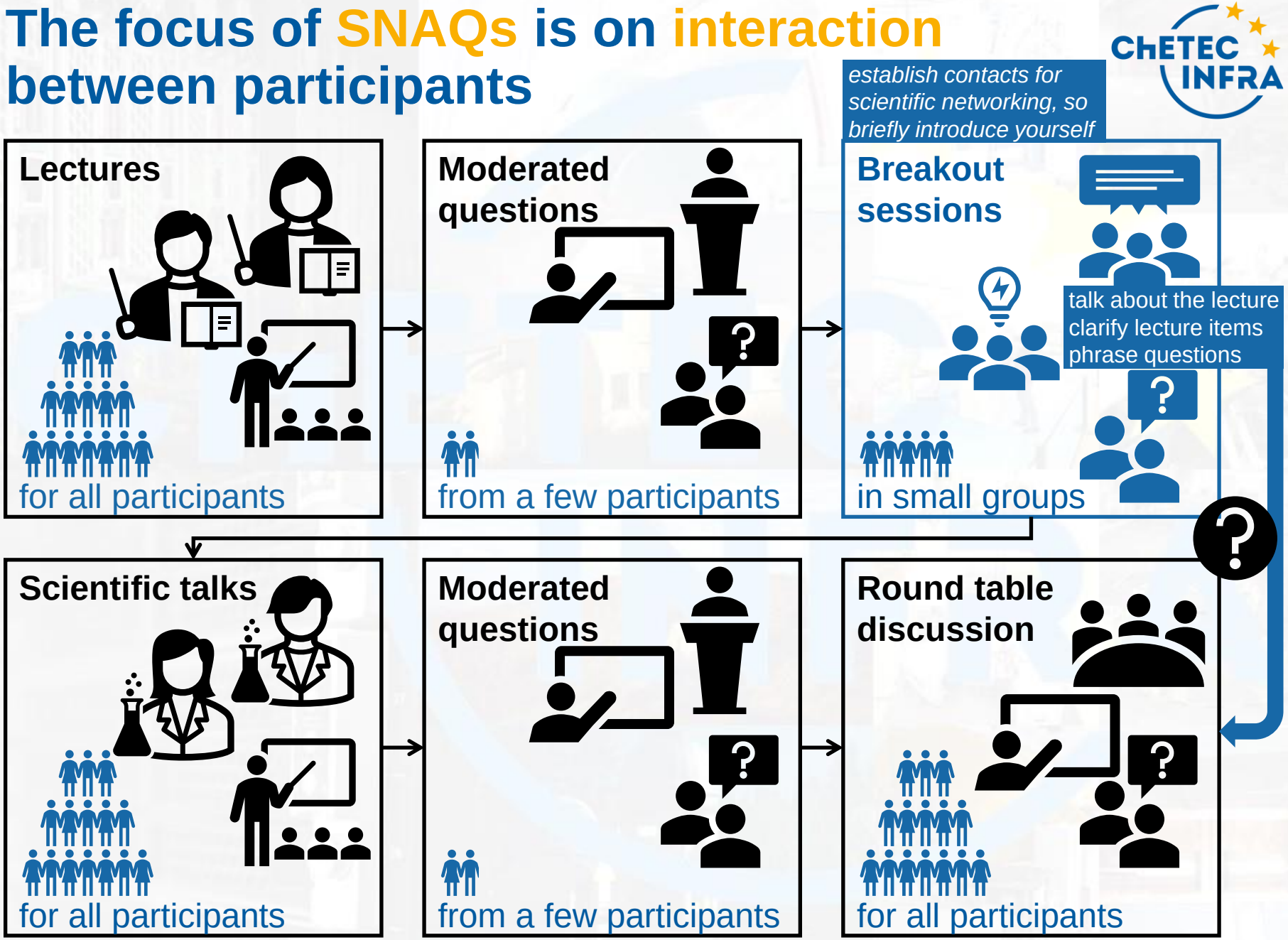
- … use breakout rooms to talk and chat to each other in smaller groups. Breakout rooms will be available during coffee breaks; participants can choose rooms freely.

- … behave professionally and respectfully
- … follow ethical standards as professional integrity and honesty
- … foster a welcoming and inclusive work environment

Online Attendance Certificates

Please contact Marcel Heine
marcel.heine@iphc.cnrs.fr

The focus of SNAQs is on interaction between participants



ChETEC-INFRA Transnational Access

EU supported access to 13 Research Infrastructures in Nuclear Astrophysics

- ★ **Astronuclear High Performance Computing**
  - University of Hull (UHULL) viper HPC*, United Kingdom*
- ★ **Astronuclear Laboratories (AMS, Reactions with Ion Beams)**
  - HZDR DREsden Accelerator Mass Spectrometry (DREAMS), *Germany*
  - HZDR Felsenkeller, *Germany*
  - Vienna Environmental Research Accelerator (VERA), *Austria*
  - Goethe University Frankfurt Van de Graaff accelerator, *Germany*
  - PTB Ion Accelerator Facility (PIAF), *Germany*
  - University of Cologne 10MV Tandem accelerator, *Germany*
  - ATOMKI Cyclotron, *Hungary*
  - IFIN-HH 3MV Tandetron, *Romania*
- ★ **Astronuclear Telescopes**
  - IANAO Rozhen National Astronomical Observatory, *Bulgaria*
  - ASU Perek 2m Telescope, *Czech Republic*
  - Aarhus University Nordic Optical Telescope (NOT), *Denmark*
  - Vilnius University Molėtai Astronomical Observatory (MAO), *Lithuania*

Apply for user time at

https://gate.hzdr.de/user/

More information at

https://www.chetec-infra.eu/tna/

Announcement: Next SNAQ on Wednesday, April 13, 2022 at 14:00 CEST (08:00 EDT)

Question

Why is attracting high school students to nuclear astrophysics a win-win for everyone?

Website

https://events.hifis.net/e/snaqs-apr2022

*This is a special **outreach** event. We will discuss why outreach is **important** for bachelor, master and PhD students, as well as for postdocs, staff scientists and professors. Thereby, we will focus on outreach for high-school students and how we can motivate them to proceed in **nuclear astrophysics**. Further, we will introduce useful **techniques and tools**.*