

ChETEC-INFRA SNAQs [snacks] Schools on Nuclear Astrophysics Questions



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

Question in December 2021

Does Nuclear Astrophysics probe fundamental physics?

Timetable (14:00 – 17:30 CET, 08:00 – 11:30 EST, 07:00 – 10:30 CST)

- | | |
|---------------|--|
| 14:00 – 14:10 | Welcome and Introduction
Konrad Schmidt , <i>Helmholtz-Zentrum Dresden-Rossendorf, Germany</i> |
| 14:10 – 14:20 | Carpathian Summer School of Physics
Livius Trache , <i>IFIN-HH Romania</i> |
| 14:20 – 15:05 | Big-Bang Nucleosynthesis as a Probe of Fundamental Physics in the Early Universe
Brian D. Fields , <i>University of Illinois, USA</i> |
| 15:15 – 16:00 | Nuclear reactions for Standard Solar Models
Aldo Serenelli , <i>Institute of Space Science, Spain</i> |
| 16:10 – 16:30 | Coffee break and breakout session |
| 16:30 – 16:45 | Cross section measurement of the ${}^3\text{He}(\alpha,\gamma){}^7\text{Be}$ reaction with γ-spectroscopy
Ákos Tóth , <i>ATOMKI, Hungary</i> |
| 16:50 – 17:05 | Underground measurement of the $\text{D}(\text{p},\gamma){}^3\text{He}$ reaction: nuclear and cosmological implications
Nikhil Mozumdar , <i>University of Padova, Italy</i> |
| 17:10 – 17:30 | 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



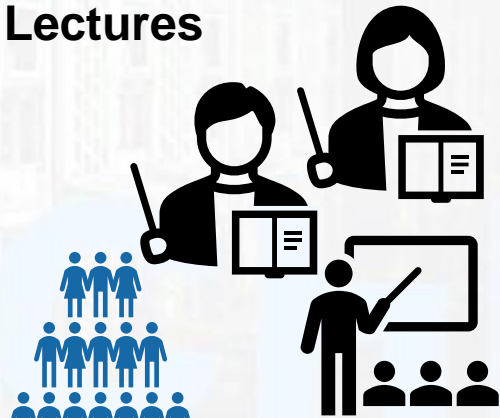
Please contact Mohamad Moukaddam moukaddam@unistra.fr



The focus of SNAQs is on interaction between participants

establish contacts for scientific networking, so briefly introduce yourself

Lectures




for all participants

Moderated questions



from a few participants

Breakout sessions



talk about the lecture
clarify lecture items
phrase questions

in small groups

Scientific talks



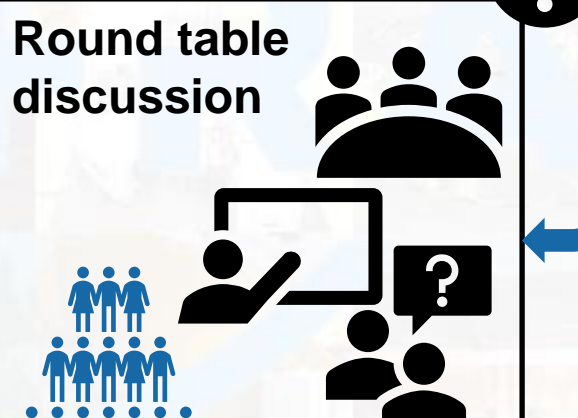
for all participants

Moderated questions



from a few participants

Round table discussion



for all participants



ChETEC-INFRA Transnational Access



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

- IANA0 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, January 12, 2022
at 15:00 CET (09:00 EST)



Question

What is the link between radioactive nuclei and astrophysics?

Website

<https://events.hifis.net/e/snags-jan2022>

Call for abstracts

We highly encourage **young scientists** (Master's and PhD students, as well as young postdocs) to apply for **scientific talks** related to the question above. If you are interested, please submit an abstract of your talk at the lower end of the registration form.

Deadline for abstract submission is Wednesday, January 5, 2022.