



Carpathian Summer School of Physics 2020
Exotic Nuclei and Nuclear/Particle Astrophysics (VIII).
Physics with small accelerators
June 28- July 11, 2020, Sinaia, Romania

First circular

General information

This is the first circular to announce the **Carpathian Summer School of Physics 2020** to be held between June 28 - July 11, 2020, in the Carpathian resort of Sinaia, Romania. It will be the 29th edition of a tradition that begun back in 1964. The title is, as above:

"Exotic Nuclei and Nuclear/Particle Astrophysics (VIII).
Physics with small accelerators"

as is the 8th in the latest series with the same title organized in Mamaia (2005) and Sinaia (2007, 2010, 2012, 2014, 2016 and 2018). It is part of the European Network of Nuclear Astrophysics Schools (ENNAS) with its counterparts in Catania, Italy and Russbach, Austria. Following consultations and in agreement with those schools' organizers we created since 2010 a network of periodic events that contribute to the formation of the younger generations of physicists in the cross disciplinary fields of nuclear physics and astrophysics through lectures and opportunities to meet and talk with some of the best active scientists. We continue this year to give a specific flavor to the event through the explicit inclusion of subjects related to physics with small accelerators, fundamental or applied research subjects. The event is supported by the European project ENSAR2 thru its Networking Activity NUSPRASEN and is recognized by the EPS.

We plan to remain faithful to the format of the latest editions: a combination of school-like format and conference format, with 1-2 hours long invited lectures by senior scientists/professors and 20 minutes short student communications. It is aimed at graduate students, post-docs and young or established researchers. Students from all countries are invited to attend. **A limited number of stipends to cover the local expenses for students will be available.** The first week will concentrate on topics of exotic nuclei and nuclear astrophysics and astroparticles, while the second will address physics with small accelerators and news about the physics and advances at ELI-NP.

Organizer

"Horia Hulubei" National Institute for Physics and Nuclear Engineering (IFIN-HH) Bucharest

Topics include, but are not restricted to:

- *Exotic nuclei*
- *Nuclear physics with RIBs*
- *Nuclear physics for astrophysics*
- *Stellar evolution. Compact stars and supernovae*
- *Astroparticle physics*
- *Multi-messenger astrophysics*
- *Stellar and laser induced plasmas*
- *Physics at ELI-NP*
- *Applications at small accelerators*
- *Nuclear astrophysics with small accelerators*
- *Instrumentation*
- *Accelerators for medical treatments, radioisotope production and industrial applications*

International Advisory Committee:

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some to be confirmed

Organizing Committee:

Livius Trache and Mihai Straticiuc: chairs
Alexandra Spiridon and Alexandra Saftoiu - scientific secretaries
Dan Filipescu, Ion Burducea, Dragos Mirea, Laurentiu Serban
Sanda Olteanu – financial director, Denisa Cranganu – secretary

Special events

A special outreach session in a round table format is being planned for the **afternoon of Saturday July 4th**. The subject decided is “Should all countries do science? What science?!”.

As in past editions, officialities of the host country involved in the research policy and in the management of research and higher education, politicians and media representatives will be invited to join the CSSP20 participants in open discussions on the above subjects. The session will be followed by the school’s banquet. Sunday July 5th, we plan the school excursion(s).

Venue, attractions

The conference will be held in **Sinaia**, a year-round mountain resort in the heart of the Carpathians, about 130 km north of Bucharest, about 1.5 hours drive from the main international airport of Bucharest (OTP).

During the school, we shall organize excursions and social events to give the participants the chance to know the Romanian landscape and culture. Sinaia is “the Pearl of the Carpathians”, a prime tourist attraction and near many first class natural and historical attractions of Romania: the Sinaia monastery and the Peles Castle (with its beautiful art collection or the open-air folklore exhibit and market). Dinning and wining at restaurants with live Romanian and international music, to mountain climbing, are all available within walking distance. Visits to old Transylvanian cities, like Brasov, Sibiu and Sighisoara, or to the Bran castle (“Dracula’s castle”) and Poiana Brasov, are possible by car, bus or train.

Accommodation

The venue of the school will be Hotel International**** (<http://www.international-sinaia.ro>), a four stars complex, where most of the participants *will be accommodated in single and double rooms and in luxury flats at prices below:*

Double room in single occupancy: 70 euro/day (exactly 325 RON/day)

Double room in double occupancy: 39 euro/ person/day (or 180 RON/person/day)

There will be also a limited (but large) number of suites available [e.g. junior suite at 475 RON/day, or ~102 euro/day.]

A local tax of 2% and one of 6 RON (~1.25 euro)/person to support the mountain emergency unit are not included in prices above.

*These group prices are offered **only** if the participants are registered **via the organizers.***

Breakfast is included in room’s price.

Lunches will be served at the same hotel and are included in the fee.

Dinners can be pre-arranged at the same hotel at about 17 euro each, or the participants can choose to manage by themselves with these meals at other restaurants that are available around, in walking distance.

A limited number of places in youth hostels just across the street will be available at lower rates for students. Please contact the organizers for advice on such arrangements.

Registration

Online registration is available at <http://www.nipne.ro/cssp20> and by email (see “Contact”).

The deadlines for registration are:

- for participants from countries that need visa for Romania (see <http://www.mae.ro>): April 12th, 2020;
- for participants from countries that do not need visa: June 14th, 2020.

A fee of **450 euro** for the two weeks stay and **240 euro** for one week will be charged covering the cost of lunches and coffee breaks and of the volume of the Proceedings for each participant.

Stipends. As a rule, the participants should be supported by their home institution. However, a limited number of fellowships will be available for students (consisting of full or partial local support for 2 weeks, but no transportation). The applicants should provide a short (one page) CV and a letter of recommendation from a professor or senior scientist who supports their application. Applications for fellowships can be made online with letters of support e-mailed to either of the directors; the **deadline is April 13th, 2020.**

The event is on the list of COST Action ChETEC (<http://www.chetec.eu/>), which may support young applicants (you apply directly and is their decision, we can only help).

Abstracts/papers. The proceedings of the conference will be published with an internationally recognized Publisher (TBD) at about 40 euro/volume (included in the above fee). A booklet of abstracts will be made available at the beginning of the School. For that, we invite the

participants who will give lectures and oral contributions to send the abstracts of their papers (less than 300 words) via email to cssp20@nipne.ro, **before June 7th, 2020**.

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Up-to-date information on our website: <http://cssp20.nipne.ro> or <http://www.nipne.ro/cssp20>

Organized by:

