



Carpathian Summer School of Physics 2014
Exotic Nuclei and Nuclear/Particle Astrophysics (V)
“From nuclei to stars”
July 13-26, 2014, Sinaia, Romania

First circular

General information

This is the first circular to announce the **Carpathian Summer School of Physics 2014** that is being organized July 13-26, 2014, in the Carpathian resort of Sinaia, Romania. This will be the 26th edition of a tradition that begun in 1964. The title is:

“Exotic Nuclei and Nuclear/Particle Astrophysics (V). From Nuclei to Stars”

and is the **5th** in the latest series with the same title organized in Mamaia (2005) and Sinaia (2007, 2010 and 2012). It is part of ENNAS (European Network of Nuclear Astrophysics Schools, with St. Tecla and Russbach). Following extensive discussions and in agreement with those schools’ organizers we create an established network of periodic events that respond to the need of preparing and educating the younger generations of physicists in the cross disciplinary fields of nuclear physics and astrophysics through lectures and meetings with some of the best active scientists. The period was chosen to follow immediately the NIC XIII in Debrecen. We plan to propose some of the NIC participants to come directly from Debrecen to Sinaia and we plan to offer a one day bus trip across Transylvania between the two locations.

The **first week** of the event will have a school-like format defined by a series of courses up to 2-4 hours each. It will be aimed at graduate students, post-docs and young researchers. Students from the host country, the surrounding regions and all countries are invited to attend. A limited number of stipends to cover the local expenses for students will be available. The **second week** will have a conference-like format, closer to the past format of the Carpathian schools, with 1 hour invited lectures. Students and young researchers will give 20 min. short communications. The goal of the first week is to have lectures from some of the best specialists in the fields announced that would prepare the students for the second part. We also intend to bring to this audience news about ELI-NP, the newest and most important scientific project that happens in the host country and the region.

Organizers

*“Horia Hulubei” National Institute for Physics and Nuclear Engineering (IFIN-HH) Bucharest
Cyclotron Institute, Texas A&M University (TAMU), College Station, Texas, USA*

Topics include, but are not restricted to:

- *Exotic nuclei*
- *Nuclear physics with RIBs*
- *Nuclear physics for astrophysics*
- *Neutron stars and EOS*
- *Issues in nuclear astrophysics & nucleosynthesis*
- *Stellar evolution. Compact stars and supernovae*
- *Cosmochemistry*
- *Neutrino physics*
- *Astroparticle physics*
- *Stellar and laser induced plasmas*
- *Physics at ELI-NP*

International Advisory Committee:

M. Ahmed* (Duke)	T. Motobayashi (Tokyo)
T. Aumann (Darmstadt)	N. Pietralla (Darmstadt)
F. Azaiez (Orsay)	Zs. Podolyak (Surrey)
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T. Kajino (Tokyo)	N. V. Zamfir (Bucharest)
K.-L. Kratz (Mainz)	
K. Langanke (Darmstadt)	

* to be confirmed

Organizing Committee:

Livius Trache and *Robert Tribble*: chairs

Daniela Chesneanu and *Calin Ur*: scientific secretaries

Dan Cozma, *Nicu Marginean* and *Denis Stanca (IFIN-HH)*, *Gabriel Tabacaru*, *Antti*

Saastamoinen and *Alexandra Spiridon (TAMU)*: members

Among the invited lecturers (as of Jan 21st 2014):

T. Aumann (Darmstadt), F. Azaiez (Orsay), D. Balabanski (Bucharest), V. Baran (Bucharest), C. Bertulani (TAMU-Commerce), M. Borge* (Geneve), A. Bonaccorso (Pisa), A. Bonasera (Catania), A. Bruce (Brighton), F. Camera (Milan), L. Corradi (Legnaro), R. Dabu (Bucharest), C. Diaconu* (Marseille), A. Fantina (Brussels), M. Freer* (Birmingham), Zs. Fulop (Debrecen), M. Gai (New Haven), S. Gales (Bucharest), F. Gulminelli (Caen), M. Hass (Rehovot), A. Haungs (Karlsruhe), M. Horoi (CMU), T. Kajino (Tokyo), U. Koster (Grenoble), K-L Kratz (Mainz), F. Ibrahim (Orsay), J. Lattimer* (Stony Brook), G. Martinez-Pinedo (Darmstadt), P. McKenna (Strathclyde), I. Mocioiu (Penn State), T. Motobayashi (Tokyo), A. Parikh (Barcelona), M. Petrovici (Bucharest), J. Piekarewicz (Tallahassee), C. Providencia (Coimbra), C. Rolfs (Bochum), M. Roth (Darmstadt), R. Rutledge* (Montreal), S.I. Sagert (Bloomington), D. Savran (Darmstadt), S. Shlomo (Texas A&M), O. Sima (Bucharest), A. Smirnov* (Trieste), G. Souliotis* (Athens), C. Spitaleri (Catania), P. Thirolf (Munich), I. Vidana (Coimbra), H. Weller (Duke), M. Wiescher (Notre Dame), P.J. Woods* (Edinburgh), S.J. Yennello* (Texas A&M), A. Zilges (Cologne) etc. (* to be confirmed)

Special events

A special outreach session in a round table format is being planned for the **afternoon of Saturday July 19th**. The subject chosen this year is:

“CERN at 60 and the internationalization of science”

Officialities of the host country involved in the research policy and in the management of research and higher education, scientists working at CERN, politicians and representatives of media will be invited to join the CSSP14 participants in open discussions on the above subject. The session will be followed by the school's banquet. Sunday July 20th 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 Romania.

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 in close proximity to many first class natural and historical attractions of Romania. Extra activities, from visiting the Sinaia monastery and the Peles Castle (with its beautiful art collection or the open-air folklore exhibit and market), to dining 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 star complex, where most of the participants *will be accommodated in single and double rooms and in luxury flats at the following prices:*

Double room in single occupancy: 60 euro/day, about 270 lei (RON= Romanian currency),

Double room in double occupancy: 34 euro/ person/day, about 160 lei

Deluxe double room: 75 euro/day, about 340 lei

*There will be also a limited number of suites available [junior suite 83, executive junior suite 90 and one bedroom suite 125 euro/day, respectively.] These 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 16 euro each, or the participants can chose 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://cssp14.nipne.ro> 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 30th 2014;
- for participants from countries that do not need visa: June 15th 2014.

A fee of about **350 euro** (TBD later, cf. prices’ evolution) for the two weeks stay and **200 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. The organizers can assist with the transportation from and to the airports in Bucharest at a cost of **25 euro**/person/trip.

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 15th 2014.**

Abstracts/papers. The proceedings of the conference will be published with an internationally recognized Publisher (TBD) at about 40 Euro/volume. 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 cssp14@nipne.ro, **before June 15th 2014.**

Contact:

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Up-to-date information on our website: <http://cssp14.nipne.ro>.

Organized by:

