



### First Announcement

The 7<sup>th</sup> International Workshop on Compound-Nuclear Reactions and Related Topics will be held from 5 to 9 October 2020 in Athens, Greece.

Following in the footsteps of the previous ones held in Yosemite National Park (2007), Bordeaux (2009), Prague (2011), Sao Paulo (2013), Tokyo (2015) and Berkeley (2018), the workshop will bring together scientists from the fields of nuclear theory, experiment, data evaluation, nuclear astrophysics and other applications.

The aim is to review the current status of experimental and theoretical efforts in compound-nuclear reactions and related areas, discuss new developments and needs for improvement, exchange ideas about how to address these needs and share perspectives on the future of the field.

The workshop will include a series of plenary talks -invited or oral contributions- as well as poster presentations. Emphasis will be put on stimulating interactions and discussions among the participants.

Topics to be covered:

- Nuclear reaction mechanisms (direct, compound, pre-equilibrium, other)
- Nuclear fission
- Statistical Hauser-Feshbach theory
- Surrogate methods
- Optical model
- Level densities and photon strength functions
- R-matrix theory and connecting resolved resonances with statistical regime
- Nuclear structure for nuclear reactions
- Measurements relevant to compound-nuclear reactions (direct and indirect)
- Nuclear data
- Applications in nuclear astrophysics, energy, medical physics etc
- Experimental facilities for experiments





### Venue

The workshop will take place at the Conference Hall and Exhibition Area of the [National Hellenic Research Foundation](#).

The National Hellenic Research Foundation (NHRF) is located in the heart of the cultural centre of Athens, among the Benaki, Byzantine, War and Modern Art museums and the National Art Gallery. It is also close to the Acropolis, Plaka (old town of Athens) and the National Concert Hall and lies within proximity of many large hotel complexes. It has access to all means of transportation while it is only 200 meters away from the new metro station, "Evangelismos".

### Scientific programme

Invited speakers will be proposed by the International Advisory Committee while oral and poster contributions will be selected from the submitted abstracts. Registration and submission of abstracts will be made online on the workshop webpage. Calls will be announced in a following circular.

A limited number of grants will be available to support the attendance of students.

### Key dates for the workshop

Abstract submission: 15 April 2020

Speaker notification: 31 May 2020

Early registration: 30 June 2020

Late registration: 5 September 2020

### International Advisory Committee

Nicolas Alamanos (CEA Saclay)

Yoran Alhassid (Yale)

Carl Brune (Ohio U)

Roberto Capote (IAEA)

Brett Carlson (ITA)

Satoshi Chiba (Tokyo Tech)

Marc Dupuis (CEA Bruyeres)

Jutta Escher (LLNL)

Stephane Goriely (ULB)

Frank Gunsing (Saclay)

Sotirios Harissopulos (IAEA)

Beatriz Jurado (CENBG)

Toshihiko Kawano (LANL)

Arjan Koning (IAEA)

Milan Krlicka (Charles U)

Helmut Leeb (TUW)

George Perdikakis (CMU)

Sunniva Siem (U Oslo)

Hiroaki Utsunomiya (Konan Univ.)

Vladimir Zelevinsky (MSU/NSCL)

Andreas Zilges (U. Cologne)





### Proceedings

The proceedings of the workshop will be published online in [EPJ Web of Conferences](#) following peer-review.

A selection of articles will be published in a topical series of EPJN on Compound Nuclear Reactions and Related Topics. These articles will be more extensive and will be peer-reviewed by [EPJ Nuclear Sciences & Technologies](#) Editorial Board and additional reviewers proposed by the organisers.

Details and instructions will be provided in a following circular.

### Practical information

#### *City of Athens*

The City of Athens offers a variety of cultural, historical, architectural and culinary attractions as well as opportunities for morning or afternoon escapades to the sea or the surrounding mountains. Information on monuments, museums, historical sites and sightseeing tours, as well as opening hours is available at the following tourism link:

[http://www.visitgreece.gr/en/main\\_cities/athens](http://www.visitgreece.gr/en/main_cities/athens)

#### *Accommodation*

The venue (National Hellenic Research Foundation) is within proximity to several hotels that are popular with tourists and conference visitors. The city of Athens offers a wide variety of accommodation, from hotels, hostels to airB&B. More information can be found on the workshop webpage.

#### *Transport*

Athens public transport system consists of a dense network of bus lines, a sparser network of trams/trolleys limited to the city centre and an expanding metro system that connects the northern suburbs with the city centre and the southern regions. More details on getting about in Athens can be found here:

[http://www.visitgreece.gr/en/travelling\\_in\\_greece/travel\\_within\\_athens](http://www.visitgreece.gr/en/travelling_in_greece/travel_within_athens)

The international airport, El. Venizelos, is connected both via metro and bus to the city centre. Look up details here: <https://www.aia.gr/traveler/>

#### *Weather*

The weather in Athens in Autumn is mostly mild and dry with average temperatures of 20°C/68°F. Detailed weather forecasts are available here: <http://www.meteo.gr/>





### Organisation

The workshop is organised by the [Institute of Nuclear and Particle Physics, National Centre for Scientific Research “Demokritos”, Athens, Greece](#), in the framework of the project “CALIBRA” (MIS 5002799) which is implemented under the Action “Reinforcement of the Research and Innovation Infrastructure”, funded by the Operational Programme “Competitiveness, Entrepreneurship and Innovation” (NSRF 2014-2020) and co-financed by Greece and the European Union (European Regional Development Fund), and in collaboration with [Los Alamos National Laboratory](#).

### Local Organising Committee

Paraskevi (Vivian) Dimitriou (NCSR “Demokritos”) - Chair

Michail Axiotis (NCSR “Demokritos”)

Anastasia Georgiadou (LANL)

Anastasios Lagoyannis (NCSR “Demokritos”)

Eleni Vagena (NCSR “Demokritos”)

All queries about the workshop should be sent to the workshop E-mail address:

[cnr2020@inp.demokritos.gr](mailto:cnr2020@inp.demokritos.gr)

Information about the workshop can be found on the workshop website:

<http://www.inp.demokritos.gr/cnr2020/>

We look forward to welcoming you to Athens, for a stimulating and fruitful workshop in the surroundings that have seen the birth of democracy and have inspired major advances in science, arts and philosophy throughout the centuries.

The Organisers

