



SECOND CIRCULAR:

16/01/2020

**10th International workshop on
Quantum Phase Transitions in Nuclei and Many-Body Systems
Dubrovnik, Croatia, 29 June - 4 July 2020**

❖ Motivation, Scientific Programme, and Hosting Institution:

This series of workshops, initially aimed at shape-phase transitions and critical point phenomena in nuclei, started in Berkeley in 2004 and continued in Camerino (2005), Athens (2006), Sofia (2007), Istanbul (2009), Darmstadt (2012), Seville (2014), Prague (2016), and Padova (2018). It is our purpose to foster an informative and exciting workshop and keep the informal spirit of lively discussions that represents the true success of these meetings. This workshop will have an introductory talk and the following 9 sessions.

Introductory talk

F. Iachello (francesco.iachello@yale.edu)

1) "Symmetries and quantum phase transitions in nuclei"

Conveners: A. Leviatan (ami@phys.huji.ac.il)

J. M. Arias (ariasc@us.es)

2) "Empirical aspects of quantum phase transitions in nuclei"

Conveners: N. Pietralla (pietralla@ikp.tu-darmstadt.de)

R. F. Casten (richard.casten@yale.edu)

3) "Transitional nuclei and shape coexistence"

Conveners: J. E. Garcia-Ramos (enrique.ramos@dfaie.uhu.es)

K. Nomura (knomura@phy.hr)

4) "Density functional and beyond-mean-field approaches to QPTs in nuclei"

Conveners: D. Vretenar (vretenar@phy.hr)

T. Nikšić (tniksic@phy.hr)

5) "Microscopic approaches to QPTs and shape evolution in nuclei"

Conveners: T. Otsuka (TBC, otsuka@phys.s.u-tokyo.ac.jp)

A. Poves (alfredo.poves@uam.es)

6) "Novel aspects and signatures of QPTs in nuclei"

Conveners: A. Vitturi (vitturi@padova.infn.it)

L. Fortunato (lorenzo.fortunato@pd.infn.it)

7) "Symmetries of interacting boson and/or fermion systems"

Conveners: P. Van Isacker (pieter.Vanisacker@ganil.fr)

J. Jolie (jolie@ikp.uni-koeln.de)

8) "Clustering and shape-phase transitions in nuclei and other physical systems"

Conveners: R. Bijker (bijker@nucleares.unam.mx)

F. Perez-Bernal (francisco.perez@dfaie.uhu.es)

9) "Excited states quantum phase transitions"

Conveners: P. Cejnar (cejnar@ipnp.troja.mff.cuni.cz),

P. Stransky (stransky@ipnp.troja.mff.cuni.cz)



Each session will take about 4 hours, including coffee breaks, and consist of long review talk(s), following by shorter (5-15 min.) contributed talks. Specific layout and time duration of talks within a given session are organized by the conveners. In the spirit of the workshop, it is ensured that ample time be allocated for discussions for each session.

Those who are interested to contribute are encouraged to contact directly to the conveners of a given session(s) via e-mail that are given above.

The workshop will be organised by The University of Zagreb, Croatia, and The Hebrew University of Jerusalem, Israel, and will be held in the historical and charming center of the city of Dubrovnik, within the premises of the Inter University Center (IUC) Dubrovnik. IUC is an independent international institution for advanced studies structured as a consortium of universities with a mission to organise and promote contact and exchange through projects, study programmes, courses and conferences across a wide range of scientific concerns. Programme directors and resource persons coming from about 170 member universities worldwide cooperate in organising the activities. IUC is open to new member institutions as well as to new programmes.

❖ Registration and Accommodation:

A renewed website of the workshop will be available around the **middle of February 2020**, that includes more detailed information about fees, accommodations, registration, etc.

❖ Practical info and contacts:

Web-site: <https://indico.cern.ch/event/826783/>

Email: gptn10@phy.hr

❖ Local Organising Committee:

Dario Vretenar (Univ. Zagreb)

Amiram Leviatan (Hebrew Univ.)

Kosuke Nomura (Univ. Zagreb)

Tamara Nikšić (Univ. Zagreb)

We are looking forward to seeing you in Dubrovnik!
The Organizing Committee