

Session Program

11-15 Jul 2022

**10TH International workshop on quantum
phase transitions in nuclei and many-body
systems**

***Density functional and beyond-mean-field
approaches to QPTs in nuclei***

Dubrovnik, Croatia
Inter-University Centre, Don Frana Bulića 4

Monday 11 July

15:00

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

Session | **Location:** IUC, Don Frana Bulića 4, Dubrovnik | **Conveners:** Dario Vretenar, Tamara Nikšić

15:00-15:30

Quantum phase transitions in microscopic nuclear structure calculations

Speaker

Tomás Raúl Rodríguez Frutos

15:30-15:55

Beyond-mean-field approaches for nuclear neutrinoless double beta decay

Speaker

Peter Ring

15:55-16:20

Nuclear charge radius predictions from DFT-based models

Speaker

Markus Kortelainen

16:20-16:45

Shape transitions triggered by the extremes of charge, isospin and angular momentum

Speaker

Anatoli Afanasjev

16:45

17:15

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

Session | **Location:** IUC, Don Frana Bulića 4, Dubrovnik | **Conveners:** Dario Vretenar, Tamara Nikšić

17:15-17:35

Coexistence of nuclear shapes: mean-field and beyond

Speaker

Tamara Nikšić

17:35-17:55

Shape coexistence with Gogny EDF: recent results

Speaker

Tomás R. Rodríguez

17:55-18:15

Shape coexistence and mixing within the Bohr model

Speaker

Petrica Buganu

18:15-18:35

Shape transitions and low level structure in the Hg region within the relativistic density functional theory

Speaker

Konstantinos Karakatsanis

18:35-18:55

Microscopic description of octupole deformations and collective excitations in even - even Xe and Ba isotopes

19:00

Speaker

Luka Lotina