

**Session Program**

**11-15 Jul 2022**

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

***Novel aspects and signatures of QPTs in  
nuclei***

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

# Thursday 14 July

09:00

## Novel aspects and signatures of QPTs in nuclei

**Session** | **Location:** IUC, Don Frana Bulića 4, Dubrovnik | **Conveners:** Andrea Vitturi, Lorenzo Fortunato

### 09:00–09:03 Introduction

#### Speaker

Lorenzo Fortunato

### 09:03–09:23 Probing nucleon-nucleon correlations in heavy ion transfer reactions

#### Speaker

Suzana Szilner

### 09:23–09:43

## Shape phase transitions and shape coexistence through two-neutron transfer

#### Speaker

José Antonio Lay Valera

### 09:43–10:03

## Prolate to oblate transition within the proxy-SU(3) symmetry

#### Speaker

Dennis Bonatsos

### 10:03–10:23

## Shape coexistence in Ni isotopic chain

#### Speaker

Giovanna Benzoni

### 10:23–10:38

## Shape evolution across the N=Z line

#### Speaker

Silvia Lenzi

11:00

11:30

## Novel aspects and signatures of QPTs in nuclei

**Session** | **Location:** IUC, Don Frana Bulića 4, Dubrovnik | **Conveners:** Lorenzo Fortunato, Andrea Vitturi

### 11:30–11:55

## Lipkin model on a quantum computer

#### Speaker

Calvin Johnson

### 11:55–12:15

## Quantum simulation and quantum phase transitions of an extended Agassi model

#### Speaker

Pedro Pérez-Fernández

### 12:15–12:35

## The use of Artificial Neural Networks in Nuclear Structure Studies

#### Speaker

Serkan Akkoyun

### 12:35–12:55

## Wobbling and chiral bands with non-axial quasiparticle alignments

**Speaker**

Radu Budaca

12:55–13:15

**The microscopic origin of the Interacting Boson Model**

**Speaker**

Andriana Martinou

13:30