

# **Giant and soft modes of excitation in nuclear structure and astrophysics**

## **Report of Contributions**

Contribution ID: 1

Type: **not specified**

# **Giant and pigmy modes from coupled-cluster theory**

*Tuesday, 25 October 2022 11:30 (45 minutes)*

**Presenter:** BACCA, Sonia

**Session Classification:** Morning Session 2

Contribution ID: 2

Type: **not specified**

## **Heavy ion double charge exchange reactions and their role in probing double beta decay nuclear matrix elements**

*Wednesday, 26 October 2022 10:00 (45 minutes)*

**Presenter:** BELLONE, Jessica (University of Catania and INFN-LNS)

**Session Classification:** Morning session 3

Contribution ID: 3

Type: **not specified**

## **Recent studies on the dipole excitations within the Subtracted Second RPA**

*Thursday, 27 October 2022 15:00 (45 minutes)*

**Presenter:** GAMBACURTA, Danilo (INFN-LNS)

**Session Classification:** Afternoon Session 4

Contribution ID: 4

Type: **not specified**

## **A short review on Pygmy Resonances: open problems**

*Monday, 24 October 2022 10:05 (45 minutes)*

**Presenter:** LANZA, Edoardo G. (INFN - Sezione di Catania)

**Session Classification:** Morning Session 1

Contribution ID: 5

Type: **not specified**

## **Investigation of low-lying dipole strengths using real photonscattering experiments**

*Tuesday, 25 October 2022 17:00 (35 minutes)*

**Presenter:** MÜSCHER, Miriam (University of Cologne)

**Session Classification:** Afternoon Session 2

Contribution ID: 6

Type: **not specified**

# **Constraining energy density functionals with dipole excitations and parity-violating electron scattering experiments**

*Wednesday, 26 October 2022 15:00 (45 minutes)*

**Presenter:** PAAR, Nils (Faculty of Science University of Zagreb)

**Session Classification:** Afternoon Session 3

Contribution ID: 7

Type: **not specified**

## **Relativistic Brueckner-Hartree-Fock Theory: an ab initio Approach for Finite Nuclei**

*Monday, 24 October 2022 14:00 (45 minutes)*

**Presenter:** RING, Peter (Physikdepartment TUM)

**Session Classification:** Afternoon Session 1



Contribution ID: 8

Type: **not specified**

## **Electric dipole polarizability and the neutron skin thickness**

*Tuesday, 25 October 2022 15:45 (45 minutes)*

**Presenter:** ROCA-MAZA, Xavier (Università degli Studi di Milano/INFN Sezione di Milano)

**Session Classification:** Afternoon Session 2

Contribution ID: 9

Type: **not specified**

## **Beyond mean field study of Giant resonances with tensor interaction**

*Monday, 24 October 2022 11:35 (45 minutes)*

**Presenter:** SAGAWA, Hiroyuki (RIKEN/University of Aizu)

**Session Classification:** Morning Session 1

Contribution ID: 10

Type: **not specified**

## **Dipole excitations in nuclei: recent studies within the largescale shell model and beyond**

*Tuesday, 25 October 2022 10:00 (45 minutes)*

**Presenter:** SIEJA, Kamila (IPHC/ CNRS Strasbourg)

**Session Classification:** Morning Session 2

Contribution ID: 11

Type: **not specified**

## **Accessing the single-particle structure of the PDR**

*Friday, 28 October 2022 09:00 (45 minutes)*

**Presenter:** SPIEKER, Mark-Christoph (Florida State University)

**Session Classification:** Morning Session 5

Contribution ID: 12

Type: **not specified**

## **Electric dipole response of nuclei studied by proton scattering**

*Wednesday, 26 October 2022 09:00 (45 minutes)*

**Presenter:** TAMII, Atsushi (Research Center for Nuclear Physics, Osaka University)

**Session Classification:** Morning session 3

Contribution ID: 13

Type: **not specified**

# **A Microscopic Approach to the Study of Pygmy and Giant Resonances**

*Wednesday, 26 October 2022 16:30 (45 minutes)*

**Presenter:** TSONEVA, Nadia (ELI-NP)

**Session Classification:** Afternoon Session 3

Contribution ID: 14

Type: **not specified**

## **Experimental signatures of a toroidal electric dipole mode in nuclei**

*Tuesday, 25 October 2022 09:00 (45 minutes)*

**Presenter:** VON NEUMANN-COSEL, Peter (Institut für Kernphysik, TU Darmstadt)

**Session Classification:** Morning Session 2

Contribution ID: 15

Type: **not specified**

# **Particle-vibration coupling effect on dipole strength function at finite temperature in the covariant density functional theory framework**

*Friday, 28 October 2022 10:00 (45 minutes)*

**Presenter:** WIBOWO, Herlik (Department of Physics, University of York)

**Session Classification:** Morning Session 5



Contribution ID: 16

Type: **not specified**

## **Pygmy or not Pygmy - an experimentalist's point of view**

*Monday, 24 October 2022 09:00 (45 minutes)*

**Presenter:** ZILGES, Andreas (University of Cologne)

**Session Classification:** Morning Session 1

Contribution ID: 17

Type: **not specified**

## Registration

**Session Classification:** Morning Session 1

Contribution ID: **18**

Type: **not specified**

## Welcome and Opening

*Monday, 24 October 2022 08:50 (10 minutes)*

**Presenters:** LITVINOVA, Elena (Western Michigan University (USA)); LENSKE, Horst (U. Giessen)

**Session Classification:** Morning Session 1

Contribution ID: **19**

Type: **not specified**

## **Discussion**

**Session Classification:** Morning Session 1

Contribution ID: 20

Type: **not specified**

## **Microscopic Structure of the Low-Energy Electric Dipole Response of $^{120}\text{Sn}$**

*Monday, 24 October 2022 15:00 (35 minutes)*

**Presenter:** WEINERT, Michael (University of Cologne)

**Session Classification:** Afternoon Session 1

Contribution ID: 21

Type: **not specified**

## **Systematics of the dipole polarizability**

*Monday, 24 October 2022 16:00 (35 minutes)*

**Presenter:** BRANDHERM, Isabelle (Technische Universität Darmstadt)

**Session Classification:** Afternoon Session 1

Contribution ID: 22

Type: **not specified**

## **Implications of PREX-2 on the electric dipole polarizability of neutron-rich nuclei**

*Monday, 24 October 2022 16:45 (45 minutes)*

**Presenter:** PIEKAREWICZ, Jorge (Florida State University)

**Session Classification:** Afternoon Session 1

Contribution ID: 23

Type: **not specified**

## Resumee of the day



Contribution ID: 24

Type: **not specified**

## **in memoriam Ricardo A. Broglia**

*Tuesday, 25 October 2022 14:15 (30 minutes)*

**Presenter:** VIGEZZI, Enrico

**Session Classification:** Afternoon Session 2

Contribution ID: 25

Type: **not specified**

## **Microscopic Calculations of Giant Pairing Vibrations in Light Nuclei**

*Tuesday, 25 October 2022 14:45 (45 minutes)*

**Presenter:** BARRANCO, Francisco (University of Seville)

**Session Classification:** Afternoon Session 2

Contribution ID: 26

Type: **not specified**

## Resumee of the day 2

Contribution ID: 27

Type: **not specified**

## Evolution of the Pygmy Dipole Resonance in Sn Isotopes

*Wednesday, 26 October 2022 11:30 (35 minutes)*

**Presenter:** MARKOVA, Maria (University of Oslo)

**Session Classification:** Morning session 3

Contribution ID: 28

Type: **not specified**

# The photon strength function and its impact on stellar nucleosynthesis

*Wednesday, 26 October 2022 14:00 (45 minutes)*

**Presenter:** GORIELY, Stephane (Université Libre de Bruxelles)

**Session Classification:** Afternoon Session 3

Contribution ID: 29

Type: **not specified**

## **Resumee of the day 3**

*Wednesday, 26 October 2022 17:30 (30 minutes)*

**Session Classification:** Afternoon Session 3

Contribution ID: **30**

Type: **not specified**

## **Spurious states in second RPA and multiphonon calculations**

Contribution ID: 31

Type: **not specified**

## **The PREX-CREX neutron skin puzzle and energy density functional theory**

*Thursday, 27 October 2022 09:00 (45 minutes)*

**Presenter:** PAPAKONSTANTINOY, Panagiota (IBS)

**Session Classification:** Morning Session 4



Contribution ID: 32

Type: **not specified**

## **Spurious states in second RPA and multiphonon calculations**

*Thursday, 27 October 2022 10:00 (45 minutes)*

**Presenter:** KNAPP, František (Institute of Particle and Nuclear Physics, Charles University, Prague, Czech Republic)

**Session Classification:** Morning Session 4

Contribution ID: 33

Type: **not specified**

## **Beyond-RPA approaches in the equation-of-motion framework**

*Thursday, 27 October 2022 11:30 (45 minutes)*

**Presenter:** LITVINOVA, Elena (Western Michigan University (USA))

**Session Classification:** Morning Session 4

Contribution ID: 34

Type: **not specified**

## **Study of dipole resonances with ab initio interactions**

*Thursday, 27 October 2022 14:00 (45 minutes)*

**Presenter:** FROSINI, Mikael (CEA - DES, IRESNE, DER, SPRC, LEPH)

**Session Classification:** Afternoon Session 4

Contribution ID: 35

Type: **not specified**

## Closing remarks

*Friday, 28 October 2022 11:30 (45 minutes)*

**Presenters:** LITVINOVA, Elena (Western Michigan University (USA)); LENSKE, Horst (U. Giessen)

**Session Classification:** Morning Session 5

Contribution ID: **36**

Type: **not specified**

## **Resumee of the day 1**

*Monday, 24 October 2022 17:45 (15 minutes)*

**Session Classification:** Afternoon Session 1

Contribution ID: 37

Type: **not specified**

## Resumee of the day 2

*Tuesday, 25 October 2022 17:45 (15 minutes)*

**Session Classification:** Afternoon Session 2