

**Advances On Giant Nuclear  
Monopole Excitations And  
Applications To  
Multi-Messenger Astrophysics**

**Report of Contributions**

Contribution ID: 1

Type: **not specified**

## Introduction

*Monday, 11 July 2022 09:30 (14 minutes)*

**Presenter:** BLUMENFELD (ON-SITE), Y. (IJCLab Orsay, France)

Contribution ID: 2

Type: **not specified**

## **Measurements of the GMR in direct kinematics at RCNP and in unstable nuclei with the MAYA active target**

*Monday, 11 July 2022 09:45 (45 minutes)*

**Presenter:** BAGCHI (REMOTE), S. (Indian Institute of Technology, Dhanbad, India)

Contribution ID: 3

Type: **not specified**

## **Experimental approach to Ktau using CAT-M active target and Grand Raiden spectrometer**

*Monday, 11 July 2022 10:30 (45 minutes)*

**Presenter:** OTA (REMOTE), S. (RCNP, Osaka, Japan)

Contribution ID: 4

Type: **not specified**

## **Predictions of the GMR using QRPA calculations and the Gogny interaction**

*Monday, 11 July 2022 11:45 (45 minutes)*

**Presenter:** PÉRU (ON-SITE), S. (CEA, DAM, DIF, Bruyères-le-Chatel)

Contribution ID: 5

Type: **not specified**

## **Self-consistent QRPA calculations for monopole and other collective modes**

*Monday, 11 July 2022 14:00 (45 minutes)*

**Presenter:** YOSHIDA (REMOTE), K.

Contribution ID: 6

Type: **not specified**

## **Effects of beyond-mean-field correlations and finite temperature on the nuclear monopole response**

*Monday, 11 July 2022 14:45 (45 minutes)*

**Presenter:** LITVINOVA (ON-SITE), E.

Contribution ID: 7

Type: **not specified**

## **Covariant EDF studies of monopole modes**

*Monday, 11 July 2022 16:00 (45 minutes)*

**Presenter:** KHAN (ON-SITE), E.



Contribution ID: 8

Type: **not specified**

## **A survey of the isoscalar giant monopole resonance from medium to heavy mass nuclei at iThemba LABS**

*Monday, 11 July 2022 16:45 (30 minutes)*

**Presenter:** BAHINI (REMOTE), A.

Contribution ID: 9

Type: **not specified**

## **Nuclear incompressibility within RHF approaches**

*Monday, 11 July 2022 17:15 (20 minutes)*

**Presenter:** CHAMSEDDINE (REMOTE), M.

Contribution ID: 10

Type: **not specified**

## **A Giant Monopole Resonance tale: there and back again between experimental and theoretical results within Gogny HFB + QRPA**

**Presenter:** BATAIL (ON-SITE), L.

Contribution ID: 11

Type: **not specified**

## **Measurements of compression modes with radioactive ion beams techniques and perspectives**

*Tuesday, 12 July 2022 09:30 (45 minutes)*

**Presenter:** RAABE (ON-SITE), R.

Contribution ID: 12

Type: **not specified**

# **Investigating the Isoscalar Giant Monopole Resonance in Ni-70 using the Active-Target Time-Projection Chamber and S800 Spectrometer**

*Tuesday, 12 July 2022 10:15 (45 minutes)*

**Presenter:** AHN (ON-SITE), T.

Contribution ID: 13

Type: **not specified**

## **First results from the ACTAR experiment at GANIL**

*Tuesday, 12 July 2022 11:30 (20 minutes)*

**Presenter:** THISSE (ON-SITE), D.

Contribution ID: 14

Type: **not specified**

## **Recent extensions of the Second RPA method and its applications to soft monopole modes**

*Tuesday, 12 July 2022 14:00 (45 minutes)*

**Presenter:** GAMBACURTA (ON-SITE), D.

Contribution ID: 15

Type: **not specified**

## **Low energy monopole strength: A novel approach to the astrophysical fusion reactions**

*Tuesday, 12 July 2022 14:45 (45 minutes)*

**Presenter:** KIMURA (REMOTE), M.



Contribution ID: 16

Type: **not specified**

## **Round table Experimental studies of the GMR (M. Harakeh, chair)**

*Tuesday, 12 July 2022 16:00 (1h 15m)*

Contribution ID: 17

Type: **not specified**

## **Giant monopole resonance in Molybdenum nuclei: role of deformation**

*Wednesday, 13 July 2022 09:35 (45 minutes)*

**Presenter:** PASTORE (REMOTE), A.

Contribution ID: 18

Type: **not specified**

## **Isoscalar giant monopole resonance in $^{24}\text{Mg}$ and $^{28}\text{Si}$ : Effect of coupling between the isoscalar monopole and quadrupole streng**

*Wednesday, 13 July 2022 10:20 (45 minutes)*

**Presenter:** USMAN (REMOTE), L.

Contribution ID: 19

Type: **not specified**

## **Bayesian inferences of nuclear EOS from heavy-ion reactions, giant resonances and neutron stars**

*Wednesday, 13 July 2022 11:30 (45 minutes)*

**Presenter:** LI (ON-SITE), B.

Contribution ID: 20

Type: **not specified**

## **Round table Theory (H. Sagawa, chair)**

*Wednesday, 13 July 2022 14:00 (1h 15m)*

**Presenter:** SAGAWA, CHAIR (ON-SITE), H.

Contribution ID: 21

Type: **not specified**

## **Nuclear incompressibility and sound speed in uniform matter and finite nuclei, impact for neutron stars.**

*Thursday, 14 July 2022 09:30 (45 minutes)*

**Presenter:** MARGUERON (REMOTE), J.

Contribution ID: 22

Type: **not specified**

## **Nuclear compressibility and EOS impact on compact star modelling**

*Thursday, 14 July 2022 10:15 (45 minutes)*

**Presenter:** FANTINA (ON-SITE), A.

Contribution ID: 23

Type: **not specified**

## **EOS influence on neutron star mergers**

*Thursday, 14 July 2022 11:30 (45 minutes)*

**Presenter:** BAUSWEIN (REMOTE), A.



Contribution ID: 24

Type: **not specified**

## **Nuclear Equation of State and Neutron Star Mergers**

*Thursday, 14 July 2022 14:00 (45 minutes)*

**Presenter:** STEINER (REMOTE), A.

Contribution ID: 25

Type: **not specified**

## **Constraining the tidal deformability from terrestrial data.**

*Thursday, 14 July 2022 14:45 (45 minutes)*

**Presenter:** AGRAWAL (REMOTE), B.

Contribution ID: 26

Type: **not specified**

## **Connections between the GMR, the LIGO measurements, and results from PREX II**

*Thursday, 14 July 2022 16:00 (45 minutes)*

**Presenter:** PIEKAREWICZ (REMOTE), J.

Contribution ID: 27

Type: **not specified**

## **Round Table Applications to multi-messenger Astrophysics (J. Margueron, chair)**

*Thursday, 14 July 2022 16:45 (1h 15m)*

**Presenter:** MARGUERON, CHAIR (REMOTE), J.

Contribution ID: 28

Type: **not specified**

## **Ab-initio description of monopole resonances in light- and medium-mass nuclei**

*Friday, 15 July 2022 09:30 (45 minutes)*

**Presenter:** PORRO (ON-SITE), A.

Contribution ID: 29

Type: **not specified**

## **Experimental Techniques for Investigation of Giant Resonances in Inverse Kinematics**

*Friday, 15 July 2022 10:15 (45 minutes)*

**Presenter:** ZAMORA (REMOTE), J.

Contribution ID: **30**

Type: **not specified**

## **Round table Future (E. Khan, chair)**

*Friday, 15 July 2022 11:30 (1 hour)*

**Presenter:** KHAN, CHAIR (IN-PERSON), E.

Contribution ID: 31

Type: **not specified**

## **Introduction ECT\* Director**

*Wednesday, 13 July 2022 09:30 (4 minutes)*

**Presenter:** AARTS, Gert



Contribution ID: 32

Type: **not specified**

## **Chair: Umesh Garg**

*Monday, 11 July 2022 09:44 (1 minute)*

Contribution ID: 33

Type: **not specified**

## **Chair: Hiroyuki Sagawa**

*Monday, 11 July 2022 13:59 (1 minute)*

Contribution ID: 34

Type: **not specified**

## **Chair: Muhsin Harakeh**

*Tuesday, 12 July 2022 09:29 (1 minute)*

Contribution ID: 35

Type: **not specified**

## **Chair: Gianluca Colò**

*Tuesday, 12 July 2022 13:59 (1 minute)*

Contribution ID: 36

Type: **not specified**

## **Chair: Elena Litvinova**

*Wednesday, 13 July 2022 09:34 (1 minute)*

Contribution ID: 37

Type: **not specified**

## **Chair: Bao-An Li**

*Thursday, 14 July 2022 09:29 (1 minute)*

Contribution ID: **38**

Type: **not specified**

## **Chair: Anthea Fantina**

*Thursday, 14 July 2022 13:59 (1 minute)*

Contribution ID: 39

Type: **not specified**

## **Chair: Yorick Blumenfeld**

*Friday, 15 July 2022 09:29 (1 minute)*



Contribution ID: 40

Type: **not specified**

## **A Giant Monopole Resonance tale: there and back again between experimental and theoretical results within Gogny HFB + QRPA**

*Tuesday, 12 July 2022 11:50 (40 minutes)*

**Presenter:** BATAIL, L.