

# Joint ICTP-IAEA Workshop on Nuclear Structure and Decay Data: experiment, theory and evaluation

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# 10<sup>th</sup> Joint ICTP-IAEA Workshop on Nuclear Structure and Decay Data: Experiment, Theory and Evaluation, 3 – 14 October 2022, Trieste



#### Lecturers:

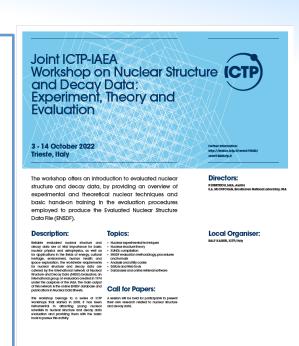
Navin Alahari (GANIL, France) - remote Xavier Mougeot (LHNB-Saclay, France) Silvia Lenzi (U. Padova-INFN, Italy) Dario Vretenar (U. Zagreb, Croatia)

#### NSDD evaluators:

Shamsuzzoha Basunia (LBNL, USA)
Jun Chen (FRIB/MSU, USA)
Tibor Kibedi (ANU, Australia) - remote
Filip Kondev (ANL, USA)
Elizabeth A. McCutchan (BNL, USA) (DIR) - remote
Gopal Mukherjee (VECC, India)
Balraj Singh (McMaster U., Canada) - remote

#### IAEA:

Paraskevi (Vivian) Dimitriou (DIR) Marco Verpelli



How to apply:

Grants:

IAEA

Deadline:

30 June 2022

### Scientific Programme



### Lectures

- experimental techniques
- > nuclear theory
- shell model
- evaluation methodology and policies
- averaging methods

Codes

Alahari, Mougeot

Vretenar, Mougeot

Lenzi

Kondev, Kibedi, Basunia, Chen

Basunia

Kondev, Kibedi, Chen, Mougeot

Databases - dissemination

Verpelli, McCutchan, Dimitriou

### Week 1: Exercises



- Data retrieval (Live Chart), Marco Verpelli
- Codes (Kondev)
- MyEnsdf Webtools (Dimitriou)

### **XUNDL** compilation

- Coordinator: Balraj Singh (presentation)
- > Split in groups of 2: 6 groups + 1 alone
- Compilation of 7 papers
- Group supervisors: Filip Kondev, Gopal Mukherjee, Vivian Dimitriou

### Week 2



### **ENSDF** evaluation

- Coordinator: Balraj Singh
- A=222:
  - Jun Chen: Ra-222, (6 students)
  - Shamsu Basunia: Rn-222 (5 students)
  - Vivian Dimitriou: Th-222 (2 students)
- Draft updates of three nuclides already prepared by Balraj Singh
- Students could either check these updates or do their own updating and compare with Balraj
- Each group had almost finalized one data set
- 8 nuclei in A=222 with ground-state properties information only updated by Balraj Singh

# **Workshop material**



- Manuals and guidelines
- Codes
- Lectures from previous workshops
- XUNDL papers
- Mass chain A=222 material (prepared by Balraj Singh)

### Students/participants



- Total: 13
- Female=54% Male=46%
- Countries: India=8, France=2, Jordan=1, S. Africa=1, USA=1

### Questionnaire



- Feedback from participants on
  - Organizational aspects
  - Scientific program, lectures, exercises
- Conclusions:
  - XUNDL+ENSDF in 2 weeks is ok; would prefer more time to do ENSDF
  - Codes should be introduced in hands-on sessions with exercises
  - 2-week duration is preferred
  - ENSDF is preferred to XUNDL

# Financial aspects



- Budget: 25K Euros + 5K from IAEA = 30K
- Students/participants costs: ~14.5K Euros
- Lecturer costs: 13K Euros
- Ratio Students/Lecturers costs not optimal not sustainable

### **ICTP 2022**



Joint ICTP-IAEA Workshop on Nuclear Structure and Decay Data: Experiment, Theory and Evaluation | (smr 3740)



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Thank you!

