

# **Structure and Reactions for Nuclear Astrophysics**

**mercredi 22 novembre 2017 - vendredi 24 novembre 2017**

**IPHC, Strasbourg**

## **Wifi**

- **eduroam**
  - **IReS-Conference**
- login: snra2017**  
**pwd: snra2107**

# Wednesday 22 November 2017

## Welcome coffee and registration - Amphithéâtre Grünwald (13:30-14:00)

### Session 1 - Amphithéâtre Grünwald (14:00-18:20)

time title

14:00	I. Ripp-Baudot IPHC presentation
14:10	A. Poves Shape coexistence; Monopole vs Multipole.
14:40	J. Duprat Isotopic analysis of cometary dust
15:10	G. Duchêne Nuclear structure evolutions in the vicinity of the N=50 gap
15:40	M. Moukkadam X-ray bursts: Indirect measurement of the astrophysical $\text{^{23}Al}(p,\gamma)$ reaction
16:10	Coffee break
16:40	K. Sieja Shell Model M1 and E1 strengths and their impact on reaction rates
17:10	B. De Canditiis The scanning table: an IPHC tool for full characterization of AGATA detectors
17:40	Discussion

## Workshop dinner (19:30-22:30)

# Thursday 23 November 2017

## **Session 2 - Amphithéâtre Grünwald (09:00-12:30)**

time title

09:00	M. Ploszajczak Continuum shell model: Towards the unified theory of nuclear structure and reactions
09:30	F. Hammache Recent results of astrophysical interest using indirect techniques
10:00	G. Lotay Experimental investigations of explosive stellar phenomena
10:30	Coffee break
11:00	P. Marevic Nuclear clustering in the energy density functional approach
11:30	M. Heine STELLA, a measurement station for deep sub-barrier fusion cross sections of light heavy-ion systems
12:00	F. Stromberg Urca processes in stellar degenerate cores

## **Lunch - Amphithéâtre Grünwald (12:30-14:00)**

## **Session 3 - Amphithéâtre Grünwald (14:00-18:00)**

time title

14:00	S. Peru QRPA approach for nuclear structure, nuclear reactions and astrophysics
14:30	M. Mousseot High-precision mass measurements of radioactive nuclei for nuclear-astrophysics
15:00	D. Verney Spectroscopy investigation of the 78Ni region : recent progress and future perspectives
15:30	D. Jenkins Clustering and superdeformation in 28Si
16:00	Coffee break
16:30	P. Adsley High-resolution study of states in Mg-26 and updated information about states contributing to Ne-22+He-4 reactions
17:00	A. Korichi
17:30	Discussion

# Friday 24 November 2017

## Session 4 - Amphithéâtre Grunewald (09:00-12:40)

time title

09:00	R. Hirschi Stellar Evolution and Key Nuclear Uncertainties
09:30	P. Descouvemont Role of the Hoyle state in $^{12}\text{C}+^{12}\text{C}$ fusion
10:00	G. Fruet New $^{12}\text{C}+^{12}\text{C}$ sub-barrier fusion cross section measurements within the STELLA project
10:30	Coffee break
11:00	G. Martinez-Pinedo Kilonova: an electromagnetic signal of heavy element nucleosynthesis
11:30	G. Montagnoli Heavy-Ion Fusion Experiments at LNL and their possible Astrophysical Interest
12:00	N. Itaco Realistic shell-model calculations for astrophysically relevant Gamow-Teller distributions
12:30	Workshop closing

## Lunch - Amphithéâtre Grunewald (12:40-14:00)

## Informal discussions - Amphithéâtre Grunewald (14:00-15:30)