

Structure and Reactions for Nuclear Astrophysics

Wednesday 22 November 2017 - Friday 24 November 2017

IPHC, Strasbourg

Recueil des résumés

Contents

A. Korichi	1
A. Poves	1
B. De Canditiis	1
D. Fahlin-Stromberg	1
D. Jenkins	1
D. Verney	1
Discussion	2
Discussion	2
F. Hammache	2
G. Duchêne	2
G. Fruet	2
G. Lotay	2
G. Martinez-Pinedo	3
G. Montagnoli	3
I. Ripp-Baudot	3
Informal discussions	3
J. Duprat	3
K. Sieja	3
M. Heine	4
M. Mougeot	4
M. Moukkadam	4
M. Ploszajczak	4
N. Itaco	4

P. Adsley	4
P. Descouvemont	5
P. Marevic	5
R. Hirschi	5
S. Peru	5
Workshop closing	5

Session 3 / 16

A. Korichi

Summary:

Session 1 / 1

A. Poves

Shape coexistence; Monopole vs Multipole.

Summary:

Session 1 / 25

B. De Canditiis

The scanning table: an IPHC tool for full characterization of AGATA detectors

Session 2 / 27

D. Fahlin-Stromberg

Urca processes in stellar degenerate cores

Summary:

Session 3 / 14

D. Jenkins

Clustering and superdeformation in ^{28}Si

Summary:

Session 3 / 13

D. Verney

Spectroscopy investigation of the ^{78}Ni region : recent progress and future perspectives

Summary:

Session 1 / 23

Discussion

Session 3 / 22

Discussion

Session 2 / 7

F. Hammache

Recent results of astrophysical interest using indirect techniques

Summary:

Session 1 / 3

G. Duchêne

Nuclear structure evolutions in the vicinity of the N=50 gap

Session 4 / 19

G. Fruet

New $^{12}\text{C}+^{12}\text{C}$ sub-barrier fusion cross section measurements within the STELLA project

Summary:

Session 2 / 8

G. Lotay

Experimental investigations of explosive stellar phenomena

Summary:

Session 4 / 21

G. Martinez-Pinedo

Kilonova: an electromagnetic signal of heavy element nucleosynthesis

Summary:

Session 4 / 20

G. Montagnoli

Heavy-Ion Fusion Experiments at LNL and their possible Astrophysical Interest

Summary:

Session 1 / 29

I. Ripp-Baudot

IPHC presentation

Summary:

28

Informal discussions

Summary:

Session 1 / 2

J. Duprat

Isotopic analysis of cometary dust

Session 1 / 5

K. Sieja

Shell Model M1 and E1 strengths and their impact on reaction rates

Session 2 / 9**M. Heine**

STELLA, a measurement station for deep sub-barrier fusion cross sections of light heavy-ion systems

Summary:

Session 3 / 12**M. Mougeot**

High-precision mass measurements of radioactive nuclei for nuclear-astronomy

Summary:

Session 1 / 4**M. Moukadam**

X-ray bursts: Indirect measurement of the astrophysical $^{23}\text{Al}(p,\gamma)$ reaction

Session 2 / 6**M. Ploszajczak**

Continuum shell model: Towards the unified theory of nuclear structure and reactions

Summary:

Session 4 / 26**N. Itaco**

Realistic shell-model calculations for astrophysically relevant Gamow-Teller distributions

Summary:

Session 3 / 15**P. Adsley**

High-resolution study of states in Mg-26 and updated information about states contributing to Ne-22+He-4 reactions

Summary:

Session 4 / 18

P. Descouvemont

Role of the Hoyle state in $^{12}\text{C}+^{12}\text{C}$ fusion

Summary:

Session 2 / 10

P. Marevic

Nuclear clustering in the energy density functional approach

Summary:

Session 4 / 17

R. Hirschi

Stellar Evolution and Key Nuclear Uncertainties

Summary:

Session 3 / 11

S. Peru

QRPA approach for nuclear structure, nuclear reactions and astrophysics

Summary:

Session 4 / 24

Workshop closing