
7th Workshop on Nuclear Level Density & Gamma Strength Program

Monday May 27

- 08:30 – 09:30 *Registration and coffee*
(Location: Helga Engshus, main hall)
- 09:30 **Welcome and opening of workshop**
(Location: Helga Engshus, Auditorium 3)
Sunniva Siem (chair) and
Morten Dæhlen (dean, Faculty of Mathematics and Natural Sciences)
- 1st session* *Chair: Sunniva Siem*
- 09:40 **Isospin effects and the nuclear electric dipole response**
Angela Bracco
- 10:10 **Theoretical description of the E1-M1 strength**
Stéphane Goriely
- 10:40 **Investigating the M1 scissors resonance in well deformed
Samarium isotopes**
Kgashane Malatji
- 11:00 *Coffee*
- 2nd session* *Chair: Sunniva Siem*
- 11:30 **New Measurements and Prospects of Normalization of Photon
Strength Functions**
Mathis Wiedeking
- 12:00 **Photoneutron cross section measurements with a direct neutron
multiplicity sorting method**
Ioana Gheorghe
- 12:20 **Properties of neutron-rich $^{71,72,73}\text{Ni}$**
Sean N. Liddick
- 12:40 **Consolidating the concept of low-energy magnetic dipole decay
radiation**
Jørgen E. Midtbø
- 13:00 *Lunch*

3rd session

14:30	<i>Chair: Magne Guttormsen</i> Constraints on the dipole γ-ray strength functions from multi-step cascade spectra M. Krticka
14:50	Recent development of DICEBOX code Stanislav Valenta
15:10	Fine structure of the pygmy quadrupole resonance Nadia Tsoneva
15:30	Study of excitation energy and angular momentum dependence of the level density parameter Pratap Roy
15:50	Estimation of Uncertainty in Calculated Gamma Cascades For Model Comparison Amanda Lewis
16:10	<i>Information, poster session</i>
17:00-19:30	<i>Poster session, Origo (Physics Building)</i>

Tuesday May 28

08:30 – 09:00	<i>Coffee</i> (Location: Helga Engs hus, main hall)
<i>1st session</i>	<i>Chair: Gry M. Tveten</i> (Location: Helga Engs hus, Auditorium 2)
09:00	Gamma Strength Functions and Level Densities along the Stable Tin Isotope Chain Peter von Neumann-Cosel
09:30	Benchmarking mean-field and beyond-the-mean-field methods for calculating level densities Yoram Alhassid
10:00	Level densities of <i>pf</i>-shell nuclei by large-scale shell-model calculations Noritaka Shimizu
10:30	Using (d,pγ) reactions as surrogates for (n, γ) Gregory Potel
11:00	<i>Coffee</i>
<i>2nd session</i>	<i>Chair:</i>
11:30	The radiative width of the Hoyle state Tibor Kibedi
12:00	A thermodynamic approach to nuclear level densities in the framework of Skyrme energy density functionals Wouter Ryssens
12:20	Modifications to conventional Hauser-Feshbach calculations Steven M. Grimes
12:40	Level densities for nuclei from 70-80 mass region from different experiments Alexander V. Voinov
13:00	<i>Lunch; Discussions on level density topics</i>
<i>3rd session</i>	<i>Chair:</i>
15:00	Rotational enhancement of the nuclear level density in the static-path plus random-phase approximation Paul Fanto
15:20	Present status of the ELIGANT setups for photonuclear reaction studies above the neutron threshold Pär-Anders Söderström

- 15:40 **Experimental constraints on level densities through cross-section correlations**
Gustavo Nobre
- 16:00 *Coffee*
- 4th session* *Chair:*
16:30 **Study of photon strength functions via $(\gamma, \gamma' \gamma'')$ reactions using quasi-monochromatic photon beams**
Johann Isaak
- 16:50 **Testing of the Brink-Axel Hypothesis in ^{208}Pb using fast protons at the CCB facility in Krakow**
Barbara Wasilewska

Wednesday May 29

- 08:30 – 09:00 *Coffee*
(Location: Helga Engs hus, main hall)
- 1st session** *Chair: Andreas G3rgen*
(Location: Helga Engs hus, Auditorium 2)
- 09:00 **Gamma-ray strength function for Ni, Ba, and Tl isotopes along the s-process path**
Hiroaki Utsunomiya
- 09:30 **Development of E1 and M1 strengths in ^{54}Fe and ^{66}Ni**
Ronald Schwengner
- 10:00 **Gamma decay of the isovector giant dipole resonance in ^{90}Zr : the damping mechanism and the fine structure**
Atsushi Tamii
- 10:30 **What do we know about the Pygmy Dipole Resonance and what can we still learn?**
Luna Pellegri
- 11:00 *Coffee*
- 2nd session** *Chair:*
- 11:30 **Nuclear shell model and the level density**
Sofia Karampagia
- 12:00 **E1 strength in ^{70}Ni Nucleus**
Oliver Wieland
- 12:30 **Preliminary results for constraining i-process reaction rates**
Caley Harris
- 12:45 **Development of the Fast Loading User Facility for Fission Yields**
Eric F. Matthews
- 13:00 *Lunch; Discussions on γ -strength function topics*
- 3rd session** *Chair:*
- 15:00 **The implementation of electric dipole transition strength in constraining the relativistic energy density functional**
Nils Paar
- 15:20 **Test of Practical Expressions for E1 Photon Strength Functions on Photoabsorption and Photodecay Data**
Kateryna Solodovnyk
- 15:40 **Dipole strength of ^{164}Dy below the neutron separation threshold**
Oliver Papst

16:00	<i>Coffee</i>
4th session	<i>Chair:</i>
16:30	Statistical gamma decay of ^{168}Er from resonance neutron capture Ingrid Knapova
16:50	Resolving discrepancies between (p,p') and (γ,xn) reactions Lindsay Donaldson

Thursday May 30

09:30 – 10:00

Coffee

(Location: outside Store Fysiske Auditorium, Physics Building)

1st session

Chair:

(Location: Store Fysiske Auditorium, Physics Building)

10:00

Recent Results with the Fission Event Generator FREYA

Ramona Vogt

10:30

Investigating the fission process: a study of the prompt fission γ -rays from the fission of $^{241}\text{Pu}^*$

Dorthea Gjestvang

10:50

Nuclear Level Density and γ -Decay Strength for ^{93}Sr

Adriana Sweet

11:10

Photon strength function of ^{196}Pt extracted from neutron radiative capture measured with DANCE detector

Nina Simbirtseva

11:30

Neutron-capture cross sections for i-process nuclei, $^{102,103}\text{Mo}$

Andrea Richard

14:00

Excursion, Akershus Castle, Group 1

<https://www.visitoslo.com/en/product/?TLp=182662#product-info2>

15:00

Excursion, Akershus Castle, Group 2 and 3

<https://www.visitoslo.com/en/product/?TLp=182662#product-info2>

16:30

Conference dinner, Oslo Militære Samfund

Friday May 31

08:30 – 09:00

Coffee

(Location: Helga Engs hus, main hall)

1st session

Chair:

(Location: Helga Engs hus, Auditorium 2)

09:00

Nucleosynthesis around ^{60}Fe via indirect neutron-capture reaction studies

Artemis Spyrou

09:30

Systematic study of the level density and γ -ray strength function of samarium isotopes

Anna Simon

10:00

Multimessenger area: Opportunities for future experiments at ISAC-II, TRIUMF

Dennis Mucher

10:20

Extension of the β -Oslo method: Preliminary results for constraining rp-process reaction rates

Stephanie Lyons

10:40

Solving the statistical mysteries of ^{133}Xe with inverse-Oslo method

Hannah C. Berg

11:00

Coffee

2nd session

Chair:

11:30

Radiative proton-capture reactions as a tool to study averaged partial γ -decay widths

Philipp Scholz

12:00

Investigating the influence of Nuclear deformation on the Pygmy Dipole Resonance

Harshna Jivan

12:20

Investigation of the γ -ray strength function of ^{87}Rb

Julius Wilhelmly

12:40

Constraining the cross section of $^{82}\text{Se}(n,\gamma)^{83}\text{Se}$ to validate the β -Oslo method

Katherine L. Childers

13:00

Lunch; Discussions on applications: nuclear astrophysics, fission, medical applications...

3rd session

Chair:

15:00

The Bay Area Nuclear Data Group

Lee A. Bernstein

15:30

Concluding remarks, end of workshop
