

# Programme

Nordic Conference on Nuclear Physics 2011  
13-17 June 2011  
Oscar Klein Auditorium, AlbaNova building  
Royal Institute of Technology, Stockholm, Sweden

## Monday, 13 June

11.00-12.55 Registration

- 13.00-13.15 Welcome and conference information
- 13.15-15.15 1st session
  - 13.15-13.45 **B. Sharkov**, (FAIR, Darmstadt)  
[\*International FAIR - Challenges and Chances\*](#)
  - 13.45-14.15 **Y. Blumenfeld** (CERN)  
[\*ISOL Developments in Europe: Towards EURISOL\*](#)
  - 14.15-14.45 **M. Thoennessen** (East Lansing)  
*Discovery of Isotopes: Past, Present and Future*
  - 14.45-15.15 **T. Nilsson** (Gothenburg)  
[\*The NUSTAR programme at FAIR\*](#)
- 15.15-15.45 Coffee break
- 15.45-17.15 2nd session
  - 15.45-16.15 **A. Gadea** (Valencia)  
[\*AGATA: The European Advanced Gamma Tracking Array\*](#)
  - 16.15-16.45 **A. Bersani** (Genova)  
*The PANDA Detector at FAIR*
  - 16.45-17.15 **K. Fissum** (Lund)  
[\*MAX-lab: Recent Results and Future Plans\*](#)

## Tuesday, 14 June

- 08.30-10.30 3rd session
  - 08.30-09.00 **P. Gianotti** (Frascati)  
[\*Results and Perspectives in Hadron Spectroscopy\*](#)
  - 09.00-09.15 **A. Kupsc** (Uppsala)  
[\*Hadron physics with KLOE-2\*](#)
  - 09.15-09.45 **M. Wolke** (Uppsala)  
[\*Symmetries and Hadron Spectroscopy with WASA-at-COSY\*](#)
  - 09.45-10.00 **P. Adlarson** (Uppsala)  
[\*The eta --> pi+pi-pi0 decay with WASA-at-COSY\*](#)
  - 10.00-10.15 **D. Parganlija** (Frankfurt)

- [The Quest for Light Scalar Quarkonia from eLSM](#)
  - 10.15-10.30 **K. Schönning** (CERN)  
[Hadron Spectroscopy with COMPASS at CERN](#)
- 10.30-11.00 Coffee break
- 11.00-12.15 4th session
  - 11.00-11.15 **L. Silva** (Lisbon)  
[Gluon polarisation measurements @ COMPASS](#)
  - 11.15-11.45 **J. Hangst** (Århus)  
*The ALPHA antihydrogen experiment*
  - 11.45-12.15 **J.J. Gaardhøje** (Copenhagen)  
[ALICE : A Large Ion Collider Experiment @ LHC](#)
- 12.30-13.00 Bus to Stockholm City Hall
- 13.00-14.30 Lunch at Stockholm City Hall, hosted by the City of Stockholm
- 14.30-15.00 Return by bus from Stockholm City Hall
- 15.00-16.30 5th session
  - 15.00-15.30 **D. Silvermyr** (Oak Ridge)  
[The Heavy-Ion Collider Era - from RHIC to LHC](#)
  - 15.30-16.00 **J. Nystrand** (Bergen)  
*Recent results on Pb+Pb Collisions at the highest energies from the CERN Large Hadron Collider*
  - 16.00-16.30 **D. Røhrich** (Bergen)  
[Photon and neutral meson production in pp and Pb+Pb collisions at ALICE](#)
- 16.30-17.00 Coffee break
- 17.00-18.30 6th session
  - 17.00-17.30 **Ch. Forssén** (Gothenburg)  
[Ab initio studies of light nuclei](#)
  - 17.30-18.00 **H. Simon** (GSI, Darmstadt)  
[At the limits of existence - light exotic nuclear systems](#)
  - 18.00-18.15 **A. Bonaccorso** (Pisa)  
[Unbound Nuclei Studied by Projectile Fragmentation](#)
  - 18.15-18.30 **R. Alvarez-Rodriguez** (Madrid)  
[Structure and 3-body decay of light-nuclei resonances](#)

## Wednesday, 15 June

- 08.30-10.30 7th session
  - 08.30-09.00 **C. Qi** (KTH, Stockholm)  
[Spin-aligned neutron-proton pair mode in atomic nuclei](#)
  - 09.00-09.30 **A. Poves** (Madrid)  
*Nuclear structure approaching the driplines*
  - 09.30-10.00 **P. van Isacker** (GANIL, Caen)  
[Aligned neutron-proton pairs in N=Z nuclei](#)
  - 10.00-10.30 **M. Hjort-Jensen** (Oslo)

[Many-body interactions and nuclear structure at the limits of stability](#)

- 10.30-11.00 Coffee break and **poster session**
- 11.00-12.30 8th session
  - 11.00-11.30 **T. Bäck** (KTH, Stockholm)  
[Measuring  \$B\(E2; 2+ \rightarrow 0+gs\)\$  in  \$^{108}\text{Te}\$  using a combined RDT - Differential Plunger Technique](#)
  - 11.30-12.00 **A. Jungclauss** (Madrid)  
*New lifetime and magnetic moment measurements in stable even-mass Sn isotopes*
  - 12.00-12.30 **T. Otsuka** (Tokyo)  
*Exotic nuclei and new features of nuclear forces*
- 12.30-13.30 Lunch (13:00-13:30 **Poster session**)
- 13.30-15.00 9th session
  - 13.30-14.00 **A. Gørgen** (Oslo)  
[Collectivity of neutron-rich nuclei –Novel techniques to measure lifetimes of excited states](#)
  - 14.00-14.30 **P. Greenlees** (Jyväskylä)  
*Properties of rotational and high-K structures in heavy nuclei*
  - 14.30-14.45 **J. Sorri** (Jyväskylä)  
*An overview of the SAGE Spectrometer*
- 14.45-15.15 Coffee
- 15.15-16.45 10th session
  - 15.15-15.30 **A. Svirikhin** (Dubna)  
[The investigation of properties of short-lived SF isotopes \( \$Z > 100\$ \) at the focal plane of VASSILISSA separator](#)
  - 15.30-15.45 **T.W. Hagen** (Oslo)  
[Spectroscopy of Transfermium Nuclei Using the GABRIELA Setup](#)
  - 15.45-16.15 **J. Randrup** (Berkeley)  
[Brownian shape motion: Fission fragment mass distributions](#)
- 18.30-22.00 Conference Dinner Cruise
  - 18.30-19.00 **Lee Riedinger** (Knoxville)  
*Keynote speech for the evening*

## Thursday, 16 June

- 08.30-10.30 11th session
  - 08.30-09.00 **W. Satula** (Warsawa)  
[Microscopic calculations of isospin mixing in  \$N \approx Z\$  nuclei and isospin-symmetry-breaking corrections to superallowed beta-decay](#)
  - 09.00-09.30 **J. Suhonen** (Jyväskylä)  
[Particle-, Nuclear- and Atomic-Physics aspects of Rare Weak Decays of Nuclei](#)
  - 09.30-10.00 **O. Naviliat-Cuncic** (East Lansing)  
[Precision correlation measurements in nuclear beta-decay](#)

- 10.00-10.15 **S. Triambak** (TRIUMF, Vancouver)  
[Precision measurements in  \$^{19}\text{Ne}\$   \$\beta^+\$  decay](#)
- 10.15-10.30 **E. Khan** (Orsay)  
[Measurement of GMR in unstable nuclei and the determination of the nuclear matter incompressibility](#)
- 10.30-11.00 Coffee break and **poster session**
- 11.00-12.30 12th session
  - 11.00-11.30 **G. de Angelis** (Legnaro)  
[The structure of neutron rich nuclei studied by grazing reactions: recent results from LNL](#)
  - 11.30-11.45 **R. Orlandi** (Madrid)  
*Transfer reactions near  $^{78}\text{Ni}$ : single-particle states in  $^{79}\text{Zn}$  and the  $N=50$  shell gap*
  - 11.45-12.00 **C. Nociforo** (GSI, Darmstadt)  
[Measurements of  \$\alpha\$ -decay half-lives at GSI](#)
  - 12.00-12.30 **A. Jokinen** (Jyväskylä)  
[Precision atomic mass measurements from applications to fundamental science](#)
- 12.30-13.30 Lunch
- 13.30-15.45 13th session
  - 13.30-14.00 **A. Boston** (Liverpool)  
*Advanced medical imaging applications of high purity germanium detectors*
  - 14.00-14.30 **F. Xu** (Beijing)  
[Extending the nuclear landscape with high-K isomers](#)
  - 14.30-14.45 **F. Recchia** (Padova)  
[The  \$N=40\$  sub-shell closure in Co nuclei](#)
  - 14.45-15.00 **M. La Cognata** (Catania)  
*The role of exotic cluster structures in astrophysics: the  $^8\text{Li}(\alpha, n)^{11}\text{B}$  case*
  - 15.00-15.30 **O. Tengblad** (Madrid)  
[Nuclear structure experiments of astrophysical interest @ a 5MV tandem accelerator](#)
  - 15.30-15.45 **C. Bordeanu** (Debrecen)  
[Overview on the astrophysical importance for the  \$^3\text{He}+^4\text{He}\$  experiment](#)
- 15.45-16.15 Coffee break
- 16.15-18.30 14th session
  - 16.15-16.30 **S. Nagy** (Heidelberg)  
[TRIGA-SPEC: high-precision experiments at a nuclear research reactor](#)
  - 16.30-16.45 **C. Böhm** (Heidelberg)  
[Direct mass measurements around the  \$Z = 82\$  shell closure](#)
  - 16.45-17.15 **I. Moore** (Jyväskylä)  
[Laser spectroscopy and resonant laser ionization – atomic tools to probe the nuclear landscape](#)
  - 17.15-17.45 **D. Seweryniak** (Argonne)  
[Studies of nuclear structure along the proton drip line with GAMMASPHERE and the Fragment Mass Analyzer](#)
  - 17.45-18.00 **F. Belloni** (Trieste)  
[Neutron-induced fission cross section measurement of  \$^{233}\text{U}\$ ,  \$^{241}\text{Am}\$  and  \$^{243}\text{Am}\$  in the energy range 0.5 MeV - 20 MeV](#)
  - 18.00-18.15 **C. Gustavsson** (Uppsala)  
[Nuclear data measurements at the new NFS facility at GANIL](#)

- 18.15-18.30 **L. Westerberg** (Uppsala)  
[An overview of applications of single and multiple ion tracks](#)

## Friday, 17 June

- 09.00-10.30 15th session
  - 09.00-09.30 **P. Ring** (Munich)  
[Energy density functional theory in nuclei, does it have to be relativistic?](#)
  - 09.30-10.00 **G. Carlsson** (Lund)  
*Nuclear DFT models*
  - 10.00-10.30 **M. Matsuo** (Niigata)  
[Pair correlation and pair collectivity in neutron-rich nuclei](#)
- 10.30-11.00 Coffee
- 11.00-12.45 16th session
  - 11.00-11.30 **S. Siem** (Oslo)  
*Gamma-strength in the quasicontinuum and its implications for astrophysics*
  - 11.30-11.45 **H-T. Nyhus** (Oslo)  
*Nuclear level densities and gamma-ray strength functions of dysprosium and palladium isotopes*
  - 11.45-12.00 **D. DiJulio** (Lund)  
[Coulomb excitation of <sup>107,109</sup>Sn](#)
  - 12.00-12.15 **J.J Valiente Dobon** (Legnaro)  
[Decay spectroscopy of neutron-rich lead isotopes](#)
  - 12.15-12.30 **J. Gellanki** (Lund)  
*Extensive gamma-ray spectroscopy of rotational band structures in <sup>62</sup>Zn*
  - 12.30-12.45 **P.-A. Söderström** (Uppsala)  
[Nuclear deformations in the region of the A=160 r-process abundance peak](#)
- 12.45-13.30 Lunch
- 13.30-15.30 17th session
  - 13.30-13.45 **T. Gorbinet** (Saclay)  
*Study of the spallation of <sup>136</sup>Xe in collisions with <sup>1</sup>H and <sup>12</sup>C at 1GeV per nucleon*
  - 13.45-14.00 **I. Lombardo** (Catania)  
[The N/Z key role on the dynamics of medium mass nuclear systems near fragmentation threshold](#)
  - 14.00-14.30 **T. Saito** (GSI, Darmstadt)  
*Hypernuclear spectroscopy with heavy ion beams at GSI: The HypHI project*
  - 14.30-15.00 **H. Sakurai** (Tokyo)  
*Highlights and future plans at RIBF*
  - 15.00-15.30 **R. Julin**  
*Closing remarks*

## Poster contributions

- F. Belloni** *Neutron beam imaging with an XY-micromegas detector at n TOF at CERN*
- L. Bläckberg** *Effects of surface coatings on the light collection in cylindrical plastic scintillators used for radioxenon detection*
- A. Bürger** *The Particle Detector SiRi at the Oslo Cyclotron Laboratory*
- R.K. Gupta** *Wong vs. Dynamical Cluster-decay Model for Heavy Ion Reaction Cross-sections*
- T. Kvalheim Eriksen** *Investigation of the properties in the quasi-continuum of  $^{107,108}\text{Pd}$*
- M. Lantz** *Design of a neutron converter for fission studies at the IGISOL facility*
- A. Lavagno** *Hadron production at finite temperature and density within an effective relativistic mean field model*
- A. Mattera** *A ROOT – based analysis tool for measurements of neutron induced fission products at the IGISOL facility*
- J. Mierzejewski** *The Incomplete Fusion reaction modeling*
- T. Mufti** *Calculating high-spin states of  $^{159}\text{Er}$  using the configuration-dependent cranked Nilsson-Strutinsky (CNS) formalism*
- S.J. Rose** *Minimization of actinide waste by multi-recycling of thoriated fuels in the EPR-reactor*
- Dh. Singh** *Isomeric cross-section ratio of  $^{74}\text{Ge}(^{16}\text{O}, p3n)^{86}\text{Y}$  reaction*
- G. Thiamova** *The IBM description of triaxial nuclei*
- S. Triambak** *M1 width of the  $2+$  state in  $^{22}\text{Na}$  and searches for tensor interactions in beta decays*
- H. Törnqvist** *Tilted foils polarization and  $\beta$ -NMR setup for REX-ISOLDE*
- M. Zamani** *Comparison between Neutron Flux and Spectrum in North Beam Tubes of Tehran Research Reactor by MCNP4C Code for BNCT*

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