

# International Workshop on Nuclear Spectroscopy Frontiers at Magnetic Spectrometers

**Monday 19 November 2012**

<b>08:00-09:00</b>	<b>Tea/Coffee on arrival and Registration</b>
<b>09:00-10:30</b>	<b>Session: Pygmy Dipole Resonance in Nuclei (I)</b>
09:00	John Carter (Wits U, South Africa): <i>Opening Address</i>
09:10	Andreas Zilges (U Köln, Germany): <i>The Pygmy Dipole Resonance - History and Overview</i>
09:50	Nadia Tsoneva (U Giessen, Germany): <i>Spectral distributions of E1 and M1 Strengths at PDR Energies</i>
<b>10:30-11:00</b>	<b>Coffee Break</b>
<b>11:00-13:00</b>	<b>Session: Spectrometer Facilities at RCNP and iThemba LABS</b>
11:00	Kichiji Hatanaka (RCNP Osaka, Japan): <i>High Energy-Resolution Measurements at RCNP</i>
11:40	Retief Neveling (iThemba LABS, South Africa): <i>The K600 at iThemba LABS</i>
12:20	Maxwell Jingo (Wits U, South Africa): <i>Investigation of Fine Structure of the Isovector Giant Dipole Resonance in Nuclei Across the Periodic Table Using Proton Inelastic Scattering at Zero Degrees</i>
12:40	Lindsay Donaldson (Wits U, South Africa): <i>Fine Structure of the Isovector Giant Dipole Resonance Using the <math>(p,pR)</math> reaction at Zero Degrees: Effects of Strong Nuclear Deformation</i>
<b>13:00-14:30</b>	<b>Lunch</b>
<b>14:30-15:50</b>	<b>Session: Gamow-Teller Strength</b>
14:30	Dieter Frekers (U Münster, Germany): <i>Experimental Results on Double-Beta Decay Matrix Elements, or What Did We Learn After so Many Years of Charge-Exchange Reaction</i>
15:10	Yoshitaka Fujita (U Osaka, Japan): <i>Nuclear Structure Made Clear by Gamow-Teller Transitions</i>
<b>15:50-16:20</b>	<b>Coffee Break</b>
<b>16:20-18:00</b>	<b>Session: Gamma Strength Functions</b>
16:20	Sunniva Siem (U Oslo, Norway): <i>Small Resonances on the Tail of the Giant Dipole Resonance</i>
17:00	Mathis Wiedeking (iThemba LABS, South Africa): <i>Low-Energy Enhancement of the Photon Strength Function</i>
17:40	Dirk Martin (TU Darmstadt, Germany): <i>Do We Understand Gamma Strength Functions - the Case of <math>^{96}\text{Mo}</math></i>

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**Tuesday 20 November 2012**

<b>08:00-09:00</b>	<b>Tea/Coffee on arrival</b>
<b>09:00-10:20</b>	<b>Session: Visit by the Minister of Science</b>
09:00	Zebulon Vilakazi (Director, iThemba LABS, South Africa): <i>Welcome address</i>
09:10	Derek Hanekom (Minister of Science, Pretoria, South Africa): <i>Address on the Occasion of the South African-German Year of Science</i>
09:30	Roland Herrmann (Consul General, Federal Republic of Germany, Cape Town): <i>Reply to Minister's address</i>
09:40	
	Peter von Neumann-Cosel (TU Darmstadt, Germany): <i>Two Decades of German/South African Scientific Collaboration – Physics on the Small Scale</i>
10:05	Retief Neveling (iThemba LABS, South Africa): <i>The K600 Spectrometer Project</i>
<b>10:20-11:00</b>	<b>Coffee Break</b>
<b>11:00-13:00</b>	<b>Session: Facets of Nuclear Structure</b>
11:00	Norbert Pietralla (TU Darmstadt, Germany): <i>Unique Information on Proton-Neutron Structure of Nuclear States from Combined Electromagnetic and Hadronic Scattering Experiments</i>
11:40	Elena Litvinova (MSU, USA): <i>Dynamical Correlations in Nuclear Spectra</i>
12:20	Kai Zuber (TU Dresden, Germany): <i>Magnetic Spectrometer Measurements for Double Beta Decay</i>
<b>13:00-14:30</b>	<b>Lunch</b>
<b>14:30-15:50</b>	<b>Session: Zero Degree (p,t) Reaction – Structure and Astrophysics</b>
14:30	Georg Berg (U Notre Dame, USA): <i>Precision Measurements for the Cosmic <math>rp</math>-Process</i>
15:10	Nico Orce (U Western Cape, South Africa): <i>The Complexity of Low-Lying <math>0^+</math> Excitations</i>
15:30	Alexander Long (U Notre Dame, USA): <i>Exploring the <math>ap</math>-Process with High Precision (<math>p,t</math>) Reactions</i>
<b>15:50-16:20</b>	<b>Coffee Break</b>
<b>16:20-17:40</b>	<b>Session: Pygmy Dipole Resonance (II)</b>
16:20	Deniz Savran (GSI, Germany): <i>On the Nature of the Pygmy Dipole Resonance</i>
17:00	Janis Endres (U Köln, Germany): <i>Overview of Experimental Conditions for <math>(\alpha,\alpha'\gamma)</math> Coincidence Experiments</i>

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**Wednesday 21 November 2012**

<b>08:00-09:00</b>	<b>Tea/Coffee on arrival</b>
<b>09:00-10:40</b>	<b>Session: E1 Response in Nuclei</b>
09:00	Atsushi Tamii (RCNP Osaka, Japan): <i>Electric Dipole Response of <math>^{208}\text{Pb}</math>: PDR, Neutron Skin, and Symmetry Energy</i>
09:40	Jonny Birkhan (TU Darmstadt, Germany): <i>Dipole Polarizability of <math>^{48}\text{Ca}</math></i>
10:00	Vladimir Ponomarev (TU Darmstadt, Germany): <i>Fine Structure of the Pygmy Resonance</i>
<b>10:40-11:10</b>	<b>Coffee Break</b>
<b>11:10-12:50</b>	<b>Session: Fine structure of the Giant Quadrupole Resonance</b>
11:10	Iyabo Usman (Wits U, South Africa): <i>Overview of Experiments on the Fine Structure of the Isoscalar Giant Quadrupole Resonance at iThemba LABS</i>
11:50	Dieter Heiss (U Stellenbosch, South Africa): <i>Time Scales in Nuclear Giant Resonances</i>
12:30	Oscar Kureba (Wits U, South Africa): <i>Effects of Nuclear Deformation on the Fine Structure of the Isoscalar Giant Quadrupole Resonance of Even-Even Neodymium Isotopes using Proton Inelastic Scattering</i>
<b>12:50-14:00</b>	<b>Lunch</b>
<b>14:00-16:20</b>	<b>Session: Alpha Clustering in Nuclei</b>
14:00	Takahiro Kawabata (U Kyoto, Japan): <i>Search for <math>\alpha</math> condensed state in <math>^{24}\text{Mg}</math></i>
14:40	Christian Diget (U York, Great Britain): <i>Cluster-Induced Reactions in Astrophysics</i>
15:20	Jacobus Swartz (U Stellenbosch, South Africa): <i>Search for the <math>0^+_5</math> <math>\alpha</math>-Cluster State in <math>^{20}\text{Ne}</math></i>
15:40	Satoshi Adachi (U Kyoto, Japan): <i>Measurement of Radiative Widths of Excited States Above the <math>\alpha</math>-Decay Threshold in <math>^{12}\text{C}</math></i>
16:00	Fhumulani Nemulodi (U Stellenbosch, South Africa): <i>Characterization of the <math>2^+</math> Excitation of the Hoyle State in <math>^{12}\text{C}</math></i>
<b>16:30</b>	<b>Bus departs from Conference Venue for iThemba LABS</b>
<b>17:00-22:00</b>	<b>Tour of iThemba LABS facility</b>
	<b>Spitbraai</b>

# International Workshop on Nuclear Spectroscopy Frontiers at Magnetic Spectrometers

Thursday 22 November 2012

<b>08:00-09:00</b>	<b>Tea/Coffee on arrival</b>
<b>09:00-10:20</b>	<b>Session: Chaos and Level Densities</b>
09:00	Sven Åberg (U Lund, Sweden): <i>Chaos and Pairing</i>
09:40	Roger Fearick (U Cape Town, South Africa): <i>Fine Structure and <math>1^-</math> Level Densities in the GDR Region in Light <math>N=Z</math> Nuclei</i>
<b>10:20-10:50</b>	<b>Coffee Break</b>
<b>10:50-13:00</b>	<b>Session: M1 Strength and New Facilities</b>
10:50	Hiroaki Matsubara (RIKEN, Japan): <i>Isoscalar and Isovector Spin-M1 Transition Strengths and Tensor Force Effect in <math>N=Z</math> and Even-Even Nuclei</i>
11:30	Robert Bark (iThemba LABS, South Africa): <i>Future Development of iThemba LABS</i>
12:10	Peter Egelhof (GSI, Germany): <i>Exotic Nuclei Studied by Direct Reactions at Low Momentum Transfer – Recent Results and Future Perspectives at FAIR</i>
12:50	Peter von Neumann-Cosel (TU Darmstadt, Germany): <i>Closing Address</i>
<b>13:00-14:30</b>	<b>Lunch</b>
<b>14:30-17:30</b>	<b>Open Round-Table Discussion</b>
	<i>Planning for the Future of the iThemba LABS Spectrometer Facility</i>