

## **Spotlight on Women in Physics**

PRETORIA, South Africa (7 March 2011). The worldwide shortage of women in physics will come under the spotlight at the 4<sup>th</sup> International Conference on Women in Physics (ICWIP) to be held from 5–8 April 2011 in Stellenbosch. The conference will also celebrate the diverse contribution of women around the globe to this field. More than 200 physicists from about 50 countries will attend this event. South Africa's Minister for Science and Technology, Ms Naledi Pandor, will open the conference on 5 April 2011.

"Physics is a wonderfully stimulating profession – it needs women – and women need physics, " says Professor Diane Grayson of the University of Pretoria, programme chair for the conference. "We must use this conference to highlight the exciting career paths that physics offers to women and remind people of the key role that physics play in our everyday lives and in many other professions – including engineering, medicine, telecommunications, environmental sciences and more!"

Professor Grayson points out that there is still a huge gender gap in physics in South Africa. "Far fewer women than men qualify as physicists and even fewer fill top academic positions in the field." In 2010, all heads of university physics departments in South Africa were men, and only 24% of all the physics graduates were women. "This conference is an opportunity to explore why South Africa has so few women physicists and to look for solutions, drawing on the perspectives of participants from dozens of countries," she adds.

Women from around the globe, including many from African countries, will debate the impact and success rate of different educational models, role model initiatives and out-of-school activities in attracting girls to physics. Another key topic on the agenda will be how to recruit and retain female physicists via a supportive culture — which often turns out to be more acceptable to all staff, regardless of gender. Delegates will share best practice examples of the kind of professional development that will significantly help female physicists to overcome obstacles in their careers.

"We believe in starting young by making physics appealing to girls at school," says Dr Mmantsae Diale, a physics lecturer at the University of Pretoria and chair of Women in Physics in South Africa (WiPiSA) – an organisation that works to attract girls to physics by providing role models and mentors for girls and female students.

"It is also vitally important that teachers must give a clear message to girls that physics is relevant and accessible to them, and that it is not only for boys," Diale adds.

There are several renowned female physicists on the ICWIP 2011 programme, including:

1. Dame Jocelyn Bell-Burnell, the British astrophysicist who first discovered pulsars (rapidly rotating stars) in 1967. Her talk at the conference will focus on pulsars and extreme physics.

- 2. Professor Cecilia Jarlskog, a Swedish scientist who found a relationship between the mass of an electron and the mass of a quark (the most fundamental particles of matter). She chaired the Nobel Committee for Physics from 1989 to 2000. At the conference in April, she will talk about the universe and its smallest constituents mysteries in particle physics.
- 3. Professor YanLai Yan, a physicist from the People's Republic of China, and winner of the prestigious Xie Xi-De Prize for physics. Her talk will be about how physics is involved in ancient Chinese chime-bells.

Another highlight of the conference will be a fun presentation by UK physicist Ann Marks, MBE, who is recognised for her contribution to physic education and outreach. In 2007, she was awarded Membership of the Order of the British Empire for her services to physics. She will demonstrate singing rods, straw oboes and other physics activities using items commonly found around the home – from coat hangers to musical boxes.

## ABOUT THE CONFERENCE

The conference is hosted by Women in Physics in South Africa, in partnership with the South African Institute of Physics. It takes place under the auspices of the international Working Group on Women in Physics, which falls under the International Union of Pure and Applied Physics. South Africa's Department of Science and Technology is the main funder of the event.

## **ABOUT PHYSICS**

Physics is the study of matter, energy and interactions. It is part of our everyday lives since everything in the physical world, from the tiniest sub-atomic particles to the universe itself, is included in the study of physics. Physics forms the basis for most of our technologies, including transportation, communication, energy and medical technology. Studying physics also helps develop powerful ways of reasoning that have applications in almost all areas of life, from running a home to modelling financial markets to exploring the furthest reaches of the universe. That is why the world needs physicists, many of them!

Issued by Marina Joubert, Southern Science, on behalf of the organisers of the  $4^{th}$  International Conference on Women in Physics.

## **MEDIA REGISTRATION**

Members of the media interested to attend the conference, or any specific lecture at the conference: Please contact Regina Maphanga on 072 577 5972 or email Rr.Maphanga@ul.ac.za

MEDIA ENQUIRIES – PRE-CONFERENCE INTERVIEWS AND COMMENTS Marina Joubert: <a href="marina@southernscience.co.za">marina@southernscience.co.za</a> / 083 409 4254 Interviews can be set up with:

- Professor Diane Grayson, email: <u>diane.grayson@up.ac.za</u>
- Dr Mmantsae Diale, email: <u>Mmantsae.Diale@up.ac.za</u>
- Dr Igle Gledhill, email: <a href="mailto:IGledhil@csir.co.za">IGledhil@csir.co.za</a>

ICWIP2011 web site: <a href="http://www.acitravel.co.za/event/index.php?eventID=20">http://www.acitravel.co.za/event/index.php?eventID=20</a> Click on "Speakers" for profiles of invited speakers.