# 3<sup>rd</sup> South Africa-JINR SYMPOSIUM

Few to Many Body Systems: Models, Methods and Applications

Blaauwklippen wine farm, Stellenbosch, South Africa November 27-30, 2012

## FIRST CIRCULAR

**BACKGROUND:** On the initiative of the JINR and South African Nuclear Physics institutions the 1st DST-UNISA-JINR Symposium was organized at Skukuza, Kruger National Park, in February 2007 and the 2nd South Africa - JINR Symposium was held at Dubna in September 2010. They helped to establish a fruitful collaboration between both nuclear physics communities.

**PRESENT MEETING:** Stellenbosch University will host the 3rd Symposium at Blaauwklippen Wine Estate, close to Stellenbosch, during the period November 27 - 30, 2012. The symposium will include three days of presentations and discussions. November 30, 2012 is set aside for an excursion (more detail later).

This symposium will present opportunity for interaction, with the main motive to bring together not only leading nuclear physicists from South Africa and the JINR but also young researchers from both sides.

The main topics will be the NICA project, topics dedicated to nuclear reactions, nuclear structure, reactor neutrons and applications; few-body problems and solid state physics. A sessions will also be dedicated to discuss the possibility of building an underground neutrino laboratory in South Africa.

Students from both sides will be given an opportunity to make short presentations on their research during the student session.

Possibilities to extend the co-operation among physicists from the JINR and South Africa will also be discussed.

This symposium will certainly be helpful in exchange of new ideas, sharing of information and presentation of latest research results. The main aim is to promote new collaborations between the South Africa and JINR communities and thereby enhance the development of nuclear physics and its applications on both sides.

Speakers of each of 12 sessions are selected by the coordinators of the session. The main idea is to have speakers from both South Africa and JINR and in addition, an expert from the field from other institutes. For more information see the meeting web page: http://theor.jinr.ru/sajinr12/

As part of the applied nuclear physics programme a meeting dedicated to discussing the start of a South African mussel-watch biomonitoring project will be organized.

The Symposium program will cover new experimental and theoretical developments in the field of nuclear physics, applied nuclear physics, condensed matter physics and physics of underground laboratories in the context of the South Africa - JINR collaboration.

#### **TOPICS:** The main topics include:

- Dense matter in heavy ion collisions and astrophysics
- Nuclear reactions, beams and facilities, techniques and applications
- Nuclear structure, clusters, modern microscopical methods
- Reactor neutrons for fundamental and applied research,
- Physics of few-body, atomic and molecular systems
- Computational and mathematical methods in many-body physics
- Nonlinear phenomena in condensed matter
- Towards the underground laboratory and particle astrophysics

#### ORGANIZING COMMITTEE:

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**BOARD and LODGING:** Accommodation will be at the Protea hotel, which is situated just across the conference venue (see web page: http://www.proteahotels.com/protea-hotel-stellenbosch.html). A single (double) occupancy room costs R 715 (R 860) per night.

**VENUE OF THE MEETING:** The symposium takes place at Blaauwklippen Wine Estate close to Stellenbosch (see web page http://www.blaauwklippen.com/).

**SOCIAL PROGRAM:** For visitors of symposium an excursion is planned on Friday, November 30, 2012. The destination of the excursion will be specified in the 2nd circular. Price of excursion will be R 500 per person.

**SYMPOSIUM PROCEEDINGS:** The Conference Proceedings are planned to be published after the Conference by the JINR Publishing Department. The Proceedings will include manuscripts of all talks at the Symposium. The detailed information about the preparation of the contribution will be given in the second circular (in October, 2012).

### Expected local costs:

$\overline{category}$		Rands
single	accomodation with breakfast (26-1 Dec), lunch (27-30 Nov),	
	dinner (27-29 Nov), excursion, registration fee (R 500)	R 6500
single with	accomodation with breakfast (26-1 Dec), lunch (27-30 Nov),	
accomp. person	dinner (27-29 Nov), excursion, registration fee (R 500)	R 7700
day attendance	lunch, dinner, registration fee (R 200)	R 800
single (with excur.)	lunch (27-30 Nov), dinner (27-29 Nov),	
	excursion, registration fee	R 2800
single (no excur.)	lunch (27-30 Nov), dinner (27-29 Nov), regist. fee (R 500)	R 2300

**APPLICATION:** Those who are interested to attend this symposium are kindly requested to register online before October 2012. We would also appreciate if you could forward this circular to other colleagues, those who are working in the related fields.

**CORRESPONDANCE:** Please, address all mails and questions to the following Conference Organizing Committee contact points:

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