# SOUTH AFRICA / JINR **COLLABORATION PROJECTS**

# **SA/JINR Secretariat: Coordinators of the Thematic Areas**



Dr. Robert Bark

Accelerator Technology, iThemba LABS



**Prof. Jean Cleymans** 

Theory and Computing Models, UCT



Prof. Noel Mkaza

**Education Programs**, Scientific Issues, US



#### Dr. Simon Mullins

Heavy lon, iThemba LABS



**Prof. Leslie Petrik** 

Applied Nuclear Technology, UWC

Dr. Sepo Hachigonta Administrative matters, NRF



Dr. Dmitry Kamanin

Collaboration coordinator, JINR

Olga Matyukhina

Liaison officer, JINR

# Joint Research Projects — Winners of the Call 2015:

#### Flerov Laboratory for Nuclear Reactions

Study of low-energy nuclear reactions with heavy and light exotic nuclei.

## Prof. M. Lekala (UNISA)

Estimation of reliability of linear point structures revealed in two-dimensional distributions of experimental data.

#### **Dzhelepov Laboratory for Nuclear Problems**

Development and study of new radiation hard scintillators for future accelerator experiments.

Dr. B. Mellado Garcia (WITS)

Frank Laboratory for Neutron Physics

# **Prof. B. Herbst (US)**

Irradiation testing of nuclear materials with heavy ions of fission fragment energy.

# **Prof. J. H. Neethling (CHRTEM NMMU)**

Research into physics and technology of ECR ion sources for the production of intense metal ion beams for heavy ion accelerators.

# **R. Thomae (iThemba Labs)**

Multifunctional track etched membranes for water treatment and monitoring.

**Prof. L. Petrik (UWC)** 

- Super Heavy Elements (SHE) spectroscopy. **Dr. S. Mullins (iThemba LABS)**
- Multi cluster decay of actinide nuclei. **Prof. N. Mkaza (US)**
- Industrial waste monitoring using gammaactivation analyses.

# Dr. F. Doucet, Dr. G. Madzivire (UWC)

Swift heavy ion irradiation testing of

Nuclear and related analytical techniques for the environmental studies in the Republic of South Africa.

**Prof. L. Petrik (UWC)** 

#### Laboratory for Radiation Biology

Radiation biology. **Prof. Jakobus Slabbert (iThemba LABS)** 

### Veksler-Baldin Laboratory of High Energy Physic

- Phase formation of thin metal layers on SiC by slow highly charged ion bombardment. Prof. J. Malherbe, Dr. T. T. Hlatshwayo (UP)
- Development and implementation of a 1+ ion injector for an Electron String Ion Source (ESIS) for the production of RIBs. **Dr. Robert Bark (iThemba LABS)**

**Bogolyubov Laboratory of Theoretical Physics** 

Programme of cooperation on theory. **Prof. J. Cleymans** 

#### nuclear materials.

## Dr. T. T. Hlatshwayo, Prof. J. Malherbe (UP)

Exotic nuclei and Rare Ion Beams (RIBs). New setup for on-line separation of transfer reaction products by selective laser ionization. **Dr. Robert Bark (iThemba LABS)** 

#### **University Center**

Education programme. Prof. N. Mkaza, Prof. M. Lekala

