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

