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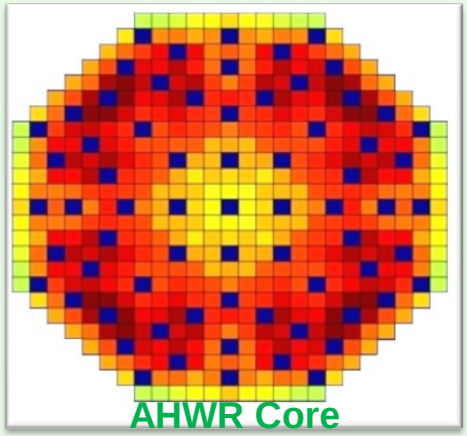
NDPCI - BRNS School

on

Nuclear Reactions and Applications

2 - 12 November, 2016



Multipurpose Hall, TSH
Anushaktinagar, Mumbai-400094

Organized by:
Nuclear Data Physics Centre of India
Bhabha Atomic Research Centre

Participation and Important Dates

- ✓ Participants pursuing M.Sc/ Ph.D in physics, desiring to attend the school may send their applications through proper channel to the secretary of the school by 15 August, 2016.
- ✓ Selection of participants will be intimated by 31 August, 2016.
- ✓ Accommodation will be provided to all out station participants. Travel assistance will be provided to a few selected student participants.

Convener

Umasankari Kannan
RPDD, BARC, Mumbai - 400085
uma_k@barc.gov.in
Tel: +91-22-25595305

Secretary

S. V. Suryanarayana
NPD, BARC, Mumbai - 400085
snarayan@barc.gov.in
Tel: +91-22-25593662

Link: www.sympnp.org/NDPCI

Background

Nuclear energy is going to play a major role to satisfy the ever increasing global demand of energy. Advanced energy systems will have to address several aspects such as safety, management of long lived wastes and proliferation resistance of fuels. Internationally, several efforts are underway towards the development of advanced nuclear systems that would use more efficiently the uranium and thorium resources, and produce a minimal amount of long-lived nuclear waste.

The design of the advanced nuclear system requires research and development in numerous fields. Nuclear Data Physics Centre of India (NDPCI) is a body established for co-ordinating all the nuclear data physics activities from laboratory to application by various users.

The success of the advanced reactor systems strongly depends on the physics inputs in terms of basic nuclear data. Recently, there have been several developments in the field of nuclear data physics worldwide. It would be appropriate to review the status in pace with the recent advances in the field. The deliberations in the school would be multi fold like revisiting the fundamentals, updating the knowledge and directions for the future work.

At this juncture, a school on "*Nuclear Reactions and Applications*" will give a platform for exchanging information on the nuclear data physics aspects such as neutron scattering, neutron induced reactions and applications for advanced reactor design.

Spectrometers in Dhruva Reactor for Condensed Matter Research

Topics to be covered

- *Theory of compound nucleus reactions.*
- *Experimental study on neutron induced reaction cross sections using n_TOF method.*
- *Error analysis of the experimental data.*
- *Evaluation and processing of the nuclear data.*
- *Neutron scattering for condensed matter application*
- *Special talks on nuclear data and applications.*