

SAINTS@tlabs Workshop

(Satellite event to the ANSTT2 Workshop)

**Primers on Metrology, Environmental Radioactivity Measurements and Gamma-ray
Spectrum Analysis with RadWare**

Date: 14-15 March 2019

Venue: Auditorium and Computer Lab,
iThemba LABS NRF (Cape Town) Auditorium

Lecturers/facilitators: TBA

Keywords: metrology, GUM, uncertainty budget, propagation of uncertainties, confidence intervals, radiometry, activity concentration, volume samples, Marinelli beakers, low-level counting, LDL, MDA, gamma-spectrometry, RadWare, GF3, ENCAL, peak fitting, peak-area analysis, energy calibration, and detection efficiency

Target group: Masters and Doctoral students in Nuclear/Applied Nuclear Physics in the early stage of their projects.

Workshop Outline:

Theme 1: guidance on how to determine the uncertainties associated with measurement.

Theme 2: the basics of environmental radioactivity measurements.

Theme 3: A hands-on introduction to gamma-ray spectrum analysis with RadWare. Students will also have an opportunity to informally engage a panel of researchers to get advice on matters (touching on themes 1-3 and more) relevant to their own research.

Organizers:

Prof Alison Bruce (Univ. of Brighton, UK)

Dr Pete Jones (Department of Subatomic Physics, iThemba LABS)

Prof Richard Newman (SAINTS Office, iThemba LABS)

Sponsors:

Science and Technology Facilities Council (UK) – Global Challenge Research Fund
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Registration: Capacity for only 20 students maximum.

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