

# MCNEG 2014

Foresight Centre, University of Liverpool

## Provisional Programme

### Monday 28<sup>th</sup> April

- 10:00 Registration, tea & coffee
- 10:50 Welcome and introduction
- 11:00 "The comparison of three Monte Carlo based codes when evaluating a complex real world nuclear environment" Steve Monk, Lancaster University
- 11:30 "FAFNIR neutron source Monte Carlo validation" Antonio Cabellero, CCFE
- 12:00 "Angular and energy dependence of effective dose for low energy photon beams and the effect of wearing radiation protection garments" Clarita Vargas, Belgian Nuclear Research Centre
- 12:30 "EURADOS Working Group 6: Computational Dosimetry" Rick Tanner, Public Health England
- 13:00 Lunch
- 14:00 Invited: Jaakko Leppänen, VTT Technical Research Centre of Finland, "~New features in the Serpent transport code",
- 15:00 Tea & coffee
- 15:30 "Developing an accurate beam model for a proton therapy spot scanning monte carlo verification system" Jenny Richardson, Christie Hospital
- 16:00 "Adaptive treatment planning in prostate radiotherapy" Turki Almatani, Swansea University
- 16:30 "Independent Monte Carlo dose calculation for radiotherapy" Antony Carver, The Clatterbridge Cancer Centre
- 17:00 Close
- 19:00 Evening meal

### Tuesday 29<sup>th</sup> April

- 09:00 "Water and tissue equivalent phantom materials for clinical proton beam dosimetry" Ana Lourenco, National Physical Laboratory
- 09:30 "Fluence correction factors for graphite calorimetry in clinical proton beams using Geant4" David Shipley, National Physical Laboratory
- 10:00 "ProSPECTus: A Compton camera for medical imaging" Amina Patel, University of Liverpool
- 10:30 Tea & coffee

- 11:00 "Modelling skin doses from microparticles" Rick Tanner, Public Health England
- 11:30 "Event-by-event transmission dosimetry with a MAPS detector" Richard Hugtenburg, Swansea University
- 12:00 "The use of FLUKA Monte Code in the re-design of the maze shape and size of the radiotherapy room at Singleton Hospital" Ihsan Al-Affan, Swansea University
- 12:30 "VisualMC for teaching radiation interactions, transport and dosimetry" Colin Baker, The Clatterbridge Cancer Centre
- 13:00 Lunch
- 14:00 Invited: Alessio Mereghetti, CERN, "Monte Carlo Radiation Transport at the CERN Accelerators"
- 15:00 "Bring your application" workshop & discussion
- 16:00 Roundup and close of meeting

### **Suggested Accommodation**

Liverpool has many hotels to choose from, here are just a couple of suggestions:

Premier Inn Liverpool City Centre (Liverpool One), 5 minute walk from Lime St Station, 15 minute walk to meeting venue

Holiday Inn, opposite Lime St Station, 12 minute walk to the venue

Alternative accommodation can be found here:

<https://resweb.passkey.com/go/MCNEG>

### **Contact**

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