# **Session Program**

15-22 Oct 2009



# 14th Geant4 Users and Collaboration Workshop

Parallel Session III - Medical

Laboratori Nazionali del Sud - INFN Via S. Sofia 62, Catania (I)

# **Thursday 15 October**

16:30

# **Parallel Session III - Medical**

Session | Location: Laboratori Nazionali del Sud - INFN, Room "Azzurra", Via S. Sofia 62, Catania (I)

# 16:30-16:50

From imaging to dosimetry: Geant4-based study on the application of Medipix2 to neutron personnel dosimetry.

#### Speaker

Dr S. Guatelli

# 16:50-17:10

Skin Dosimetry in MRI-guided Radiotherapy (MRIgRT)

#### Speaker

Mr Bradley Oborn

### 17:10-17:30

Geant4-based studies to characterise the tissue-equivalence of SOI and diamond microdosimeter detectors, under development at CMRP.

#### **Speaker**

Dr S. Guatelli

## 17:30-17:50

Dosimetric study of photon dose distribution in lungs under different respiratory phases: comparison with GEANT4 simulations

#### Speaker

Dr Barbara Caccia

## 17:50-18:10

Implementation of a Monte Carlo - GEANT4 Simulation for the dosimetric study of electron beams produced by a mobile accelerator for IORT

# Speaker

Dr Giorgio Russo

## 18:10-18:30

The role of Geant4 in the production of a database for an ion therapy Treatment Planning System

#### Speaker

Germano Russo

#### 18:30-18:50

Geant4 based simulation of the Leksell Gamma Knife for treatment planning validation

# Speaker

Dr Francesco Romano

18:50