## Seminarium Studium Doktoranckiego NCBJ Poniedziałek, 9 kwietnia, godzina 9:00 Sala 22 w NCBJ, Hoża 69

Speaker: Sarah Allen

(Studium Doktoranckie NCBJ)

## Title: Simulation and analysis of detective quantum efficiency in mammography

Abstract: The detective quantum efficiency (DQE) of an imaging device describes its ability to preserve the signal to noise ratio from the radiation field to the resulting image data. Since in X-ray imaging the noise of the radiation field is heavily dependent on the air kerma, DQE values are used to describe the dose efficiency of a device. In this seminar, I will outline why DQE is used to quantify image quality in radiographic systems and how it is calculated. I will also discuss these things in context of a mammography unit.