

**Speaker:** Jochen Einbeck

**Title:** A primer to statistical dosimetry

**Abstract:** Exposure to ionizing radiation triggers several types of damage, and associated repair mechanisms, inside the human cell. Some of such phenomena can be measured, and used as biomarkers for radiation exposure. We discuss statistical techniques to convert such measurements into an estimate of contracted radiation dose of an individual, including techniques to quantify the uncertainty of such estimates.

**Background literature/material:**

<https://www.gov.uk/government/publications/biological-dosimetry-statistical-methods>

<https://dro.dur.ac.uk/27000/>