

## ROSI - A Monte Carlo simulation for x-ray tubes

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When developing x-ray tubes, the energy spectrum and the intensity of the x-ray radiation is most important. To calculate x-ray spectra, there are programs which are based on experimental data. These programs are only able to calculate spectra from anode materials which are explicitly provided. Using the object-oriented framework LSCAT-GISMO we have developed ROSI, a Monte Carlo simulation which is capable of simulating arbitrary anode materials and even arbitrary tube geometries. ROSI uses the well established EGS4-algorithms with the LSCAT-extension.

We will present the easy-to-use interface as well as the concept of ROSI and show the good agreement between simulation results and experimental data.

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