

Compact Photon Source simulations

Samples	Igor@MCNP6	Pavel@DINGER/Geant3		
Samples	Neutrons (rem/h)	Gamma-rays (rem/h)	Neutrons (rem/h)	Gamma-rays (rem/h)
Iron sphere	11.5+-0.7	0.16+-0.05	146+-?	0.40+-?
Tungsten sphere	4.4+-0.5	0.05+-0.02	13+-?	0.06+-?

- The physical models implemented in the **MCNP6** code take into account bremsstrahlung photon production, photonuclear reactions, gamma-ray and neutron multiple scattering processes.

- The **MCNP** model simulates a **11.5 GeV** and **2.6 μA** (beam power = 30 kW) electron beam hitting the iron and tungsten spheres. Electron transport was traced.