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【202】Isotopes for diagnostics and therapy of cancer

Wednesday 11 September 2024 17:30 (30 minutes)

Radioactive compounds are important role in the diagnosis and treatment of cancer. Accelerator facilities are used to produce diagnostic radionuclides (β+ and γ-emitters). Most therapeutic nuclides are produced via neutron irradiation. The production route via nuclear spallation reaction after bombardment with high-energy protons is an innovative way of producing medically interesting radionuclides but is underdeveloped.

We will present the concept TATTOOS (”Targeted Alpha Therapy using Terbium and Other Oncological Solutions”) proposed by PSI together with the UZH/USZ. With TATTOOS we will produce isotopically and radiochemically pure radionuclides for medical purposes using the world’s most powerful proton accelerator HIPA at PSI.

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