CAS course on "Normal- and Superconducting Magnets", 19 November - 02 December 2023, St. Pölten, Austria



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Magnets for medical applications

Friday 1 December 2023 12:00 (1 hour)

This lecture is an overview of Magnets for Medical Applications using Particle Accelerator.

In the first part of the lecture we will give an introduction to different accelerators employed in hadron therapy to cure cancer as cyclotrons and synchrotrons. in the second part of the lecture, we will present the MedAustron experience including some of the aspects related to commissioning with beam and operating magnets for clinical operations.

The MedAustron Particle Therapy Accelerator located in Austria delivers proton beams in the energy range 60-250 MeV and carbon ions 120-400 MeV/n for tumour treatment in three irradiation rooms. Proton beams up to 800 MeV are also provided to a separate room dedicated to research. Over the last years, in parallel to clinical operations, we have completed the installation and commissioning of the whole accelerator including a proton gantry beamline and the first world-wide rotator.

Presenter: PIVI, Mauro (MedAustron)