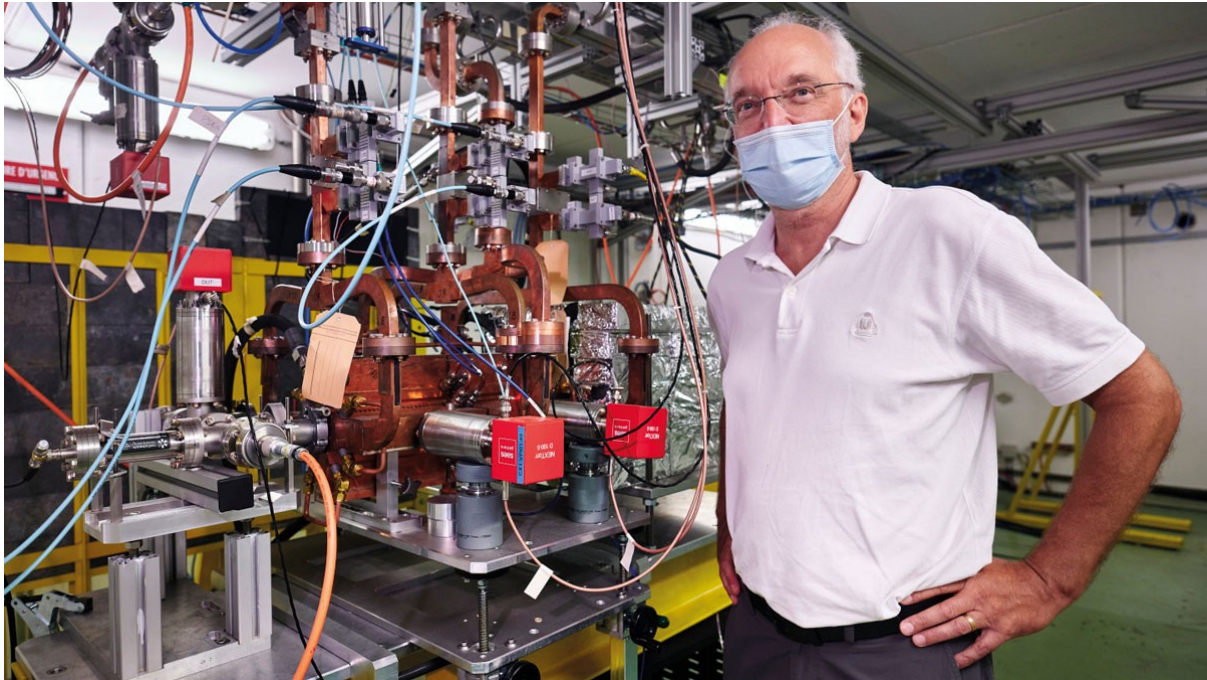


The CHUV-CERN Collaboration on a High-energy Electron FLASH Therapy Facility

Joint accelerator institutes seminar series - Michaelmass 2021
Dr. Walter Wuensch (CERN)



Abstract:

A very hot topic in radiation oncology is the so-called FLASH therapy, which involves delivering an entire radiation treatment in a few hundred milliseconds or less. This fast delivery can reduce toxicity to healthy tissue while maintaining tumour control, thus expanding the parameter space for treatment. The effect has been observed in experiments and clinical translation is now underway. As part of this effort, Lausanne Hospital (CHUV) and CERN have formed a collaboration to design and build a clinical FLASH-capable facility for treatment of large, deep-seated tumours using high-energy, 100 MeV-range, electrons accelerated with electron linac technology developed by the CLIC linear collider study.