

Medical Applications @ CERN

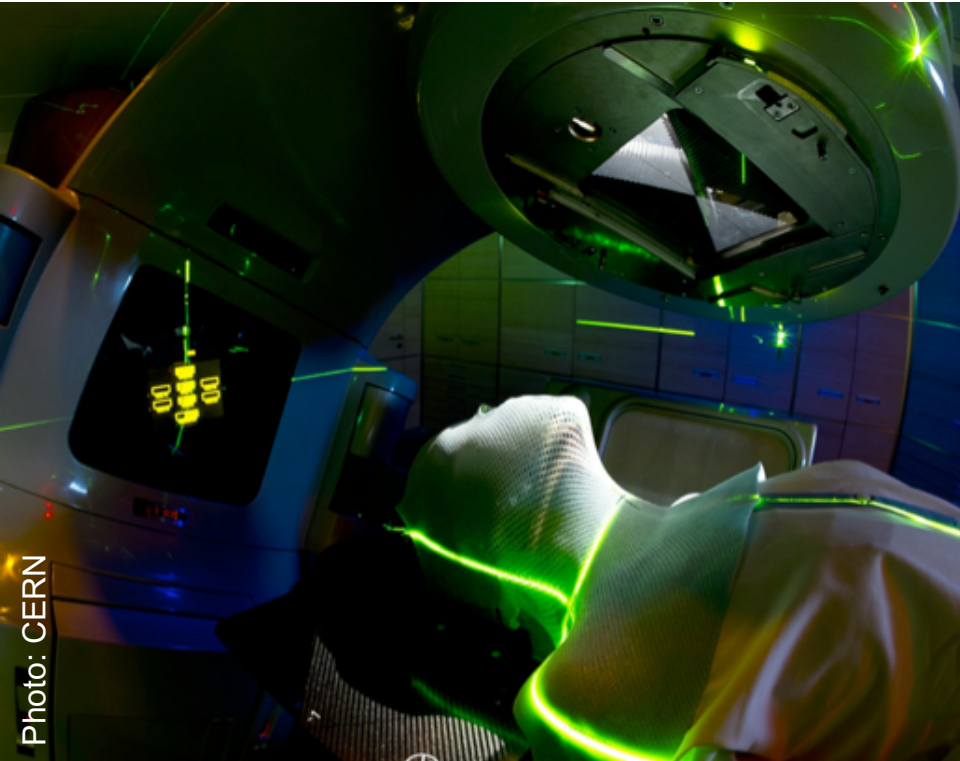


Photo: CERN

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Knowledge Transfer | *Accelerating Innovation*

CERN's mission

Push back the frontiers of knowledge

Develop new technologies

Train scientists and engineers of tomorrow

Unite people from different countries and cultures



KT Mission

Maximize the technological and knowledge return to Society, especially in the Member States

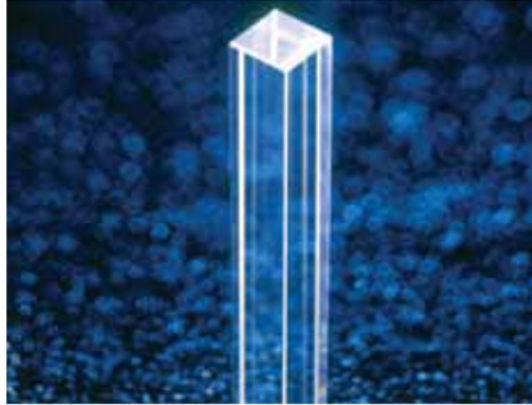
Promote CERN's image as a center of excellence for technology

dissemination and impact!



From physics to...

Medicine
and biology



Aerospace



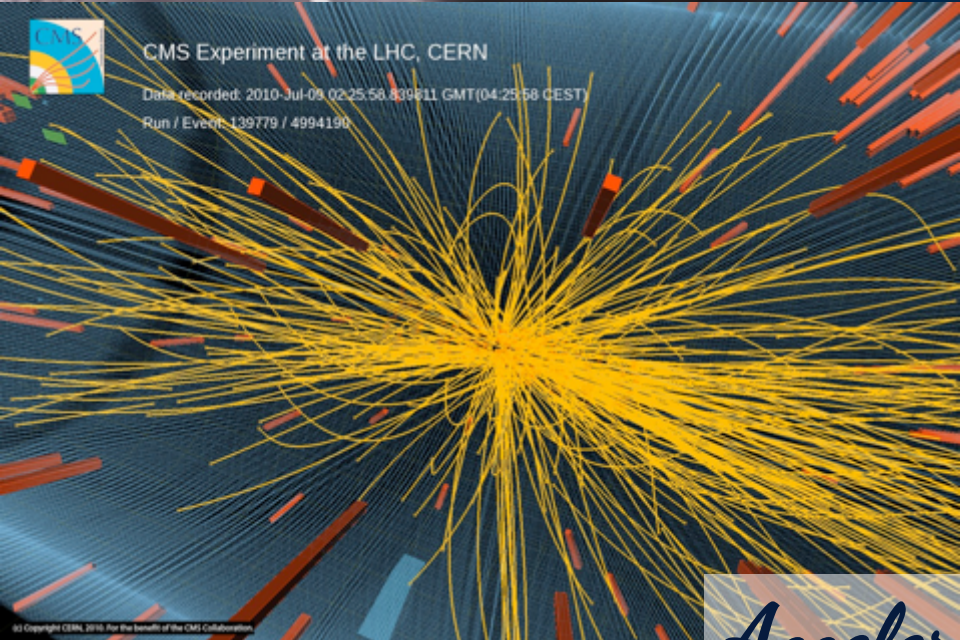
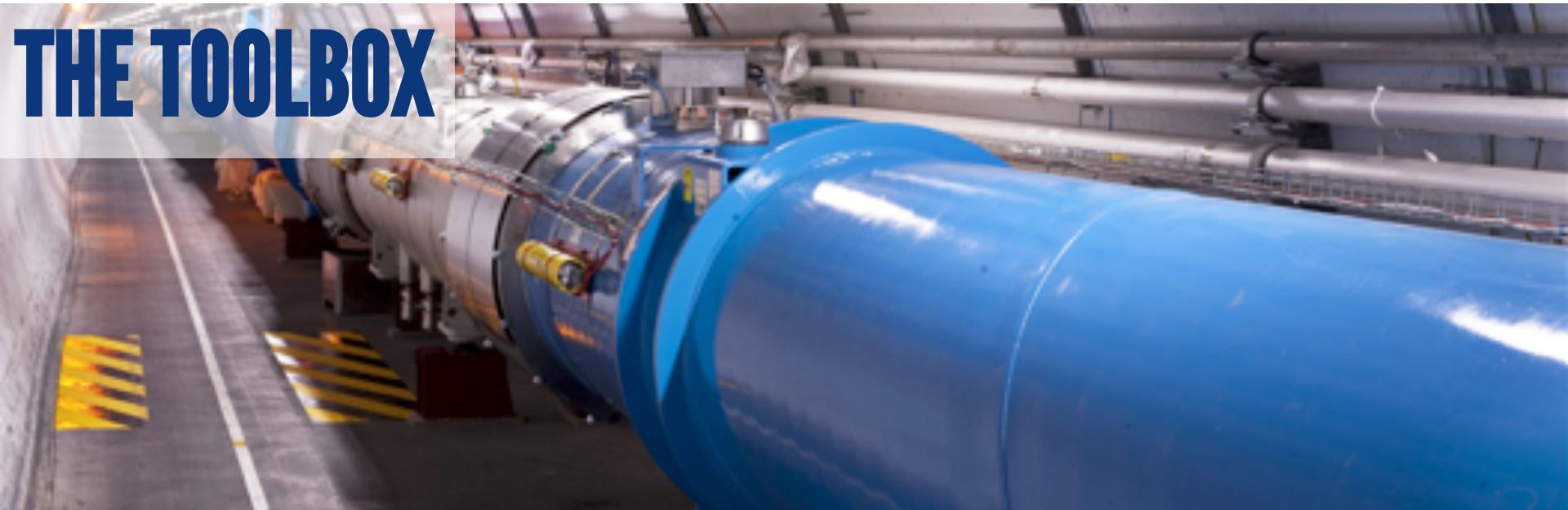
Safety



Global
communities



THE TOOLBOX



CMS Experiment at the LHC, CERN

Data recorded: 2010-Jul-09 02:25:58.839611 GMT(04:28:58 CEST)

Run / Event: 139779 / 4994190



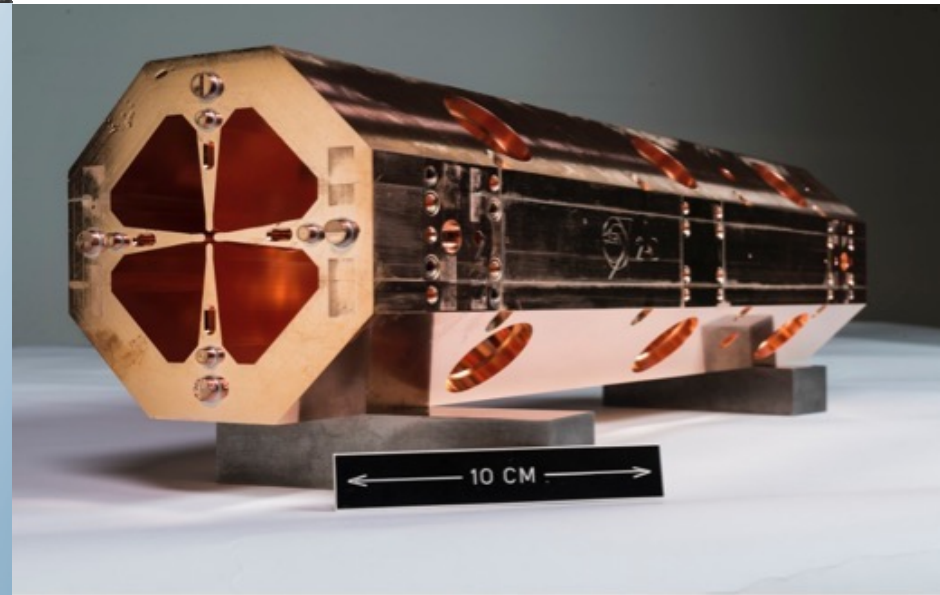
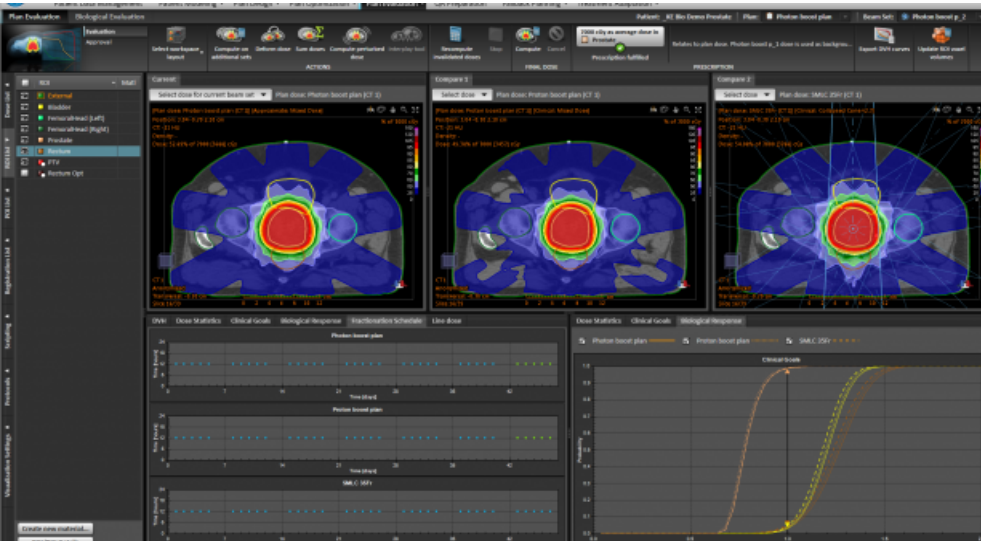
Accelerators, detectors, computing



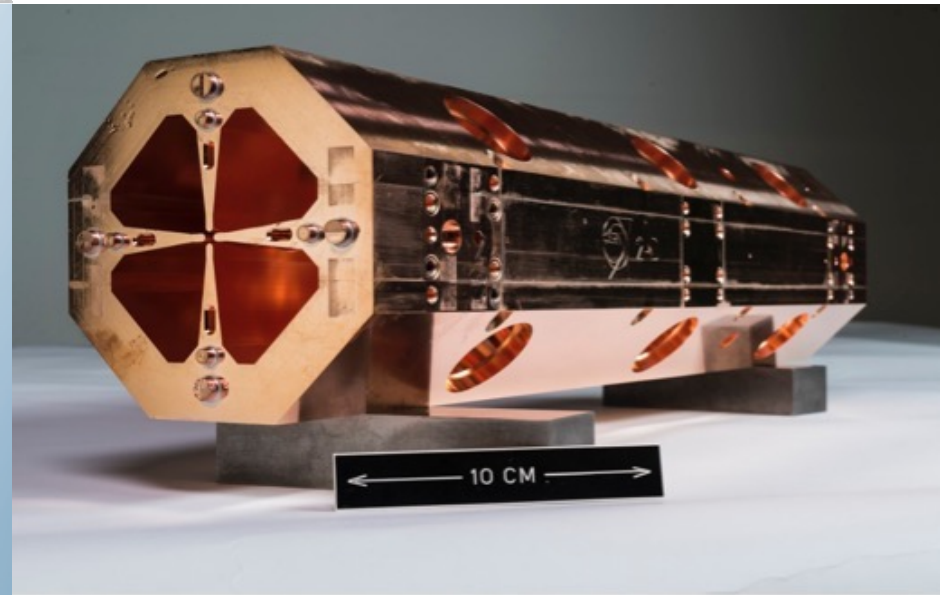
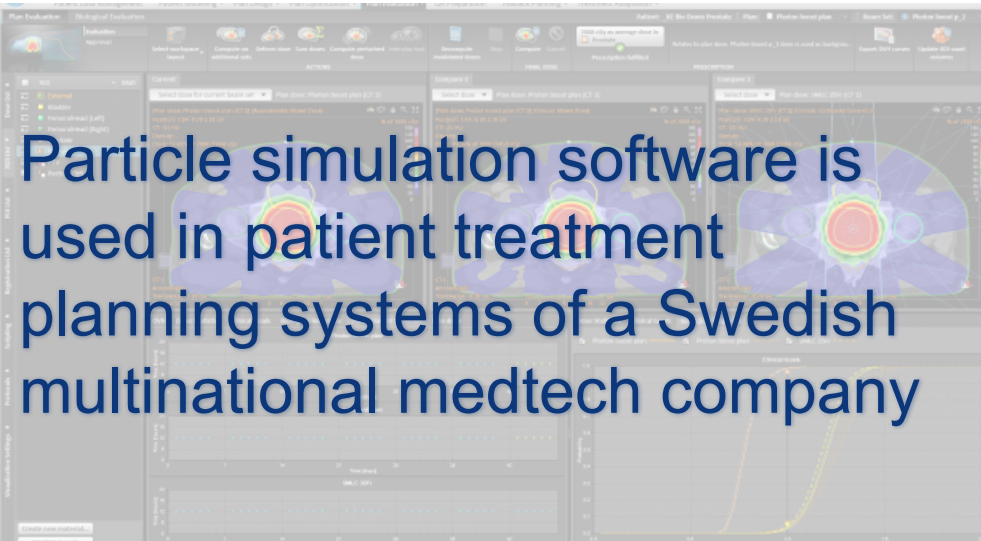
Knowledge Transfer | *Accelerating Innovation*

EURADOS WG9 @CERN, 17 October 2016

Examples of transfers 2015



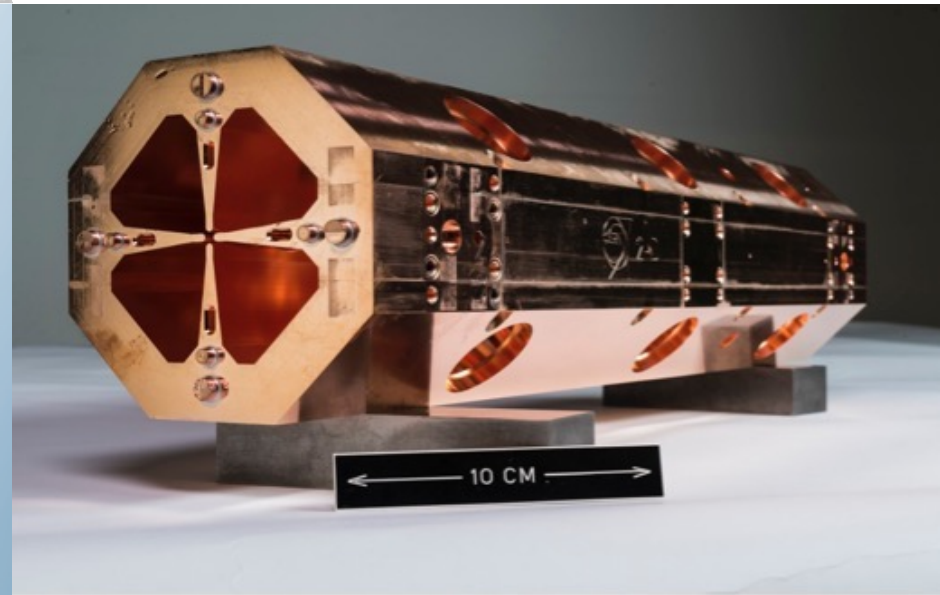
Examples of transfers 2015



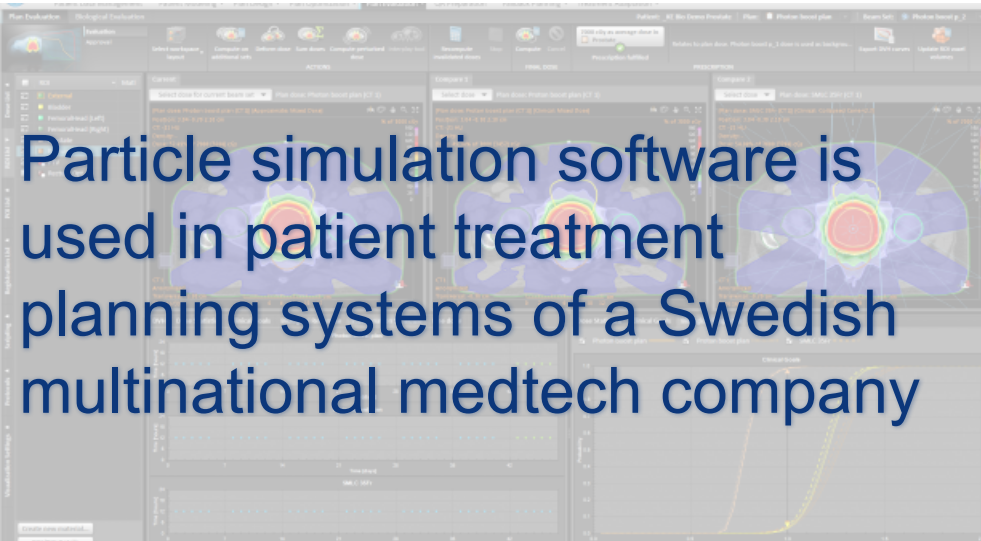
Examples of transfers 2015



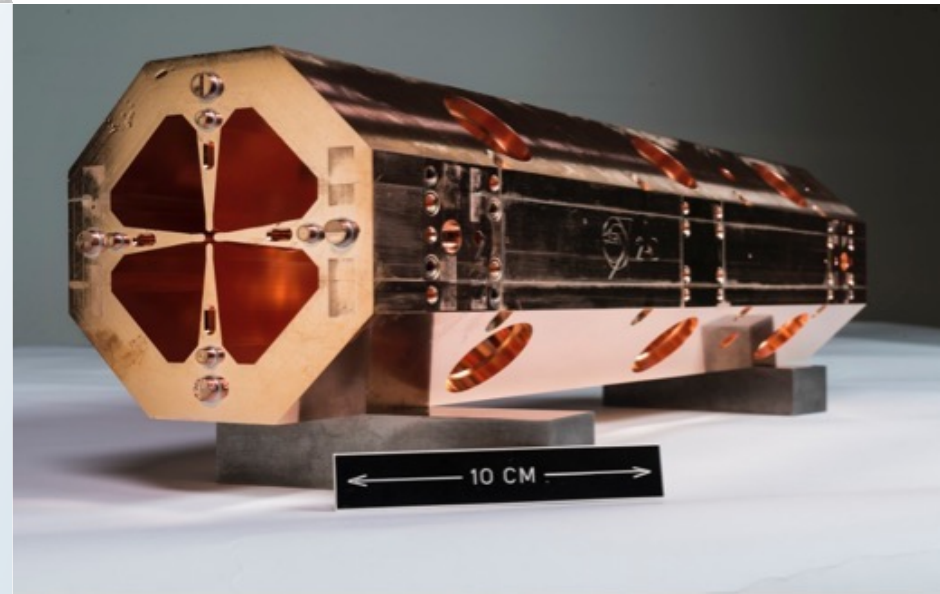
Document management software is used by a major university and a major international organization, as a commercial service provided by a CERN spin-off.



Examples of transfers 2015



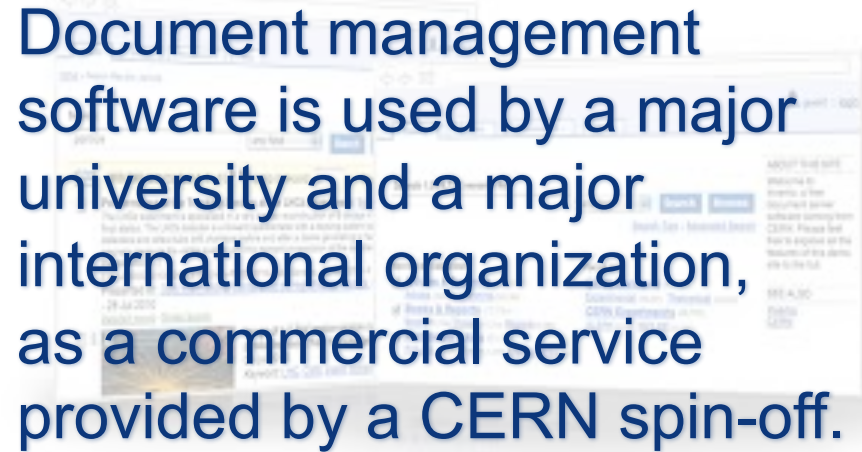
Document management software is used by a major university and a major international organization, as a commercial service provided by a CERN spin-off.



Examples of transfers 2015



Particle simulation software is used in patient treatment planning systems of a Swedish multinational medtech company

A screenshot of a document management software interface. The interface shows a list of documents with columns for name, date, and status. There are search bars and navigation buttons. The text is overlaid on the screenshot.

Document management software is used by a major university and a major international organization, as a commercial service provided by a CERN spin-off.

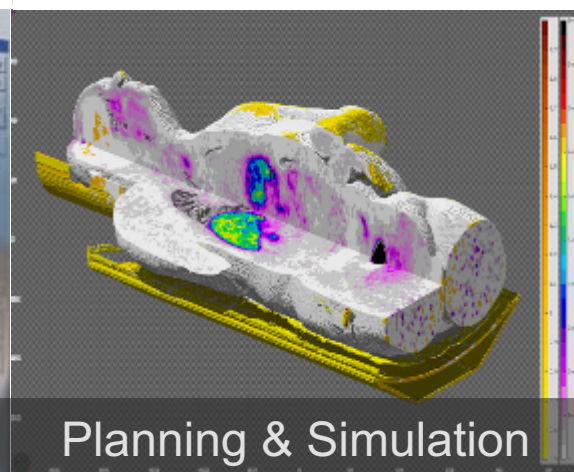
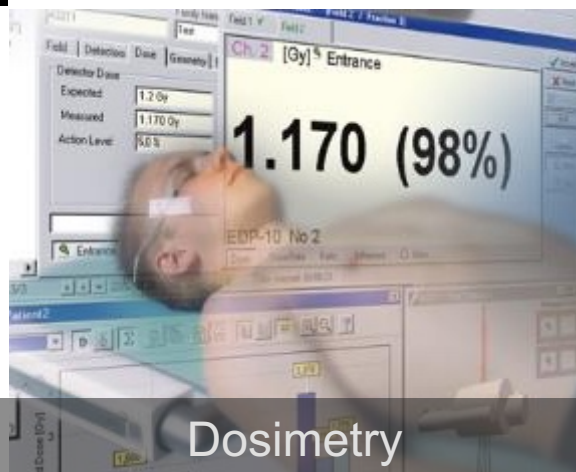
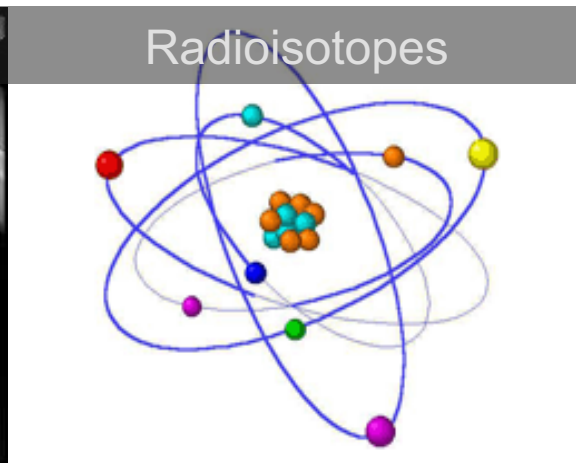
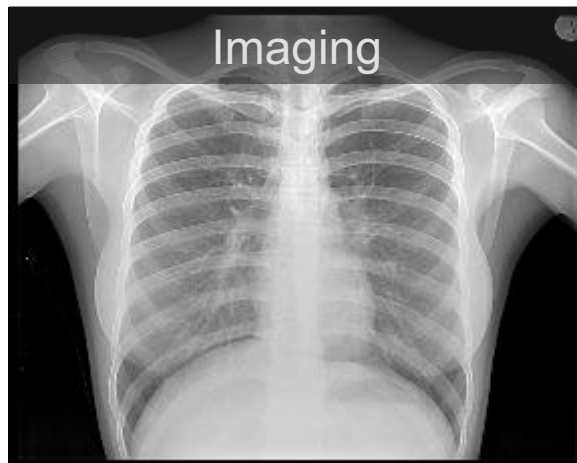


Radiation monitoring technology is commercially available as an off-the-shelf product of a young Italian company



The «miniature accelerator» is being integrated into a commercial proton therapy system by a CERN spin-off.

Strategic fit between CERN IP and medicine



MRI Systems

Dosimetry

Planning & Simulation

Medical Applications @ CERN

Identify CERN technologies and know-how with the highest potential for future use in diagnosis and therapy

Select those where CERN has unique competences

Bring these particular technologies and know-how to a readiness level that allows MedTech companies to take them into hospitals and medical research centres



Medical Applications @ CERN

Take into account the limited resources available for non-particle physics activities

Address specific requests from CERN Member States

Carefully consider the legal implications posed by projects involving, for example, clinical trials or sensitive medical data



Thank you for your attention

Are there any questions?



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