

SCOPE FOR TODAY

Does Europe need a facility?

If yes, to better understand requirements and needs

The aim is to collect expectations from the future user community for the design of the facility.

Which particles and what energies

Position paper for the European Strategy Preparatory Symposium in September and for identifying funding sources (EC, and other possibilities?.....)

Why are we having this brainstorming...

What would be the purpose of such a facility;

- Radiobiology
- Applied Physics

What end-station equipment is (a) the minimum and (b) most desirable?

What biology labs are required?

Has to be based on CERN model of working: open calls and peer reviewed.....

Needs for a radiation facility

Increase radiobiological knowledge:

- Cell response to different dose fractionations
- Early and late effects on healthy tissue
- Irradiation of cell at different oxygenation levels
- Differing radio-sensitivity of different tumours/patients

Simulations:

- Ballistics and optimization of particle therapy treatment planning
- Validation of Monte Carlo codes at the energies of treatment and for selected ion-target combinations

Instrumentation tests:

- Providing a beam line to test dosimeters, monitors and other detectors used in hadron therapy