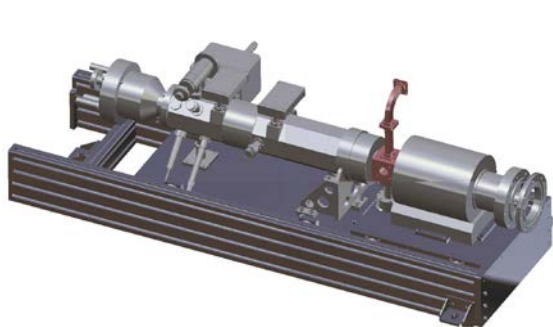


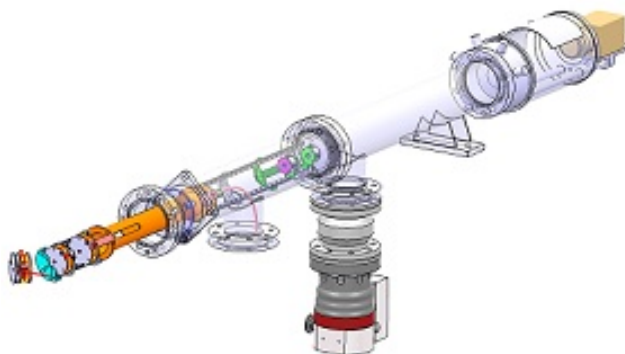
OTHER PROJECTS AND R&D PROGRAMS

ANDROMEDE

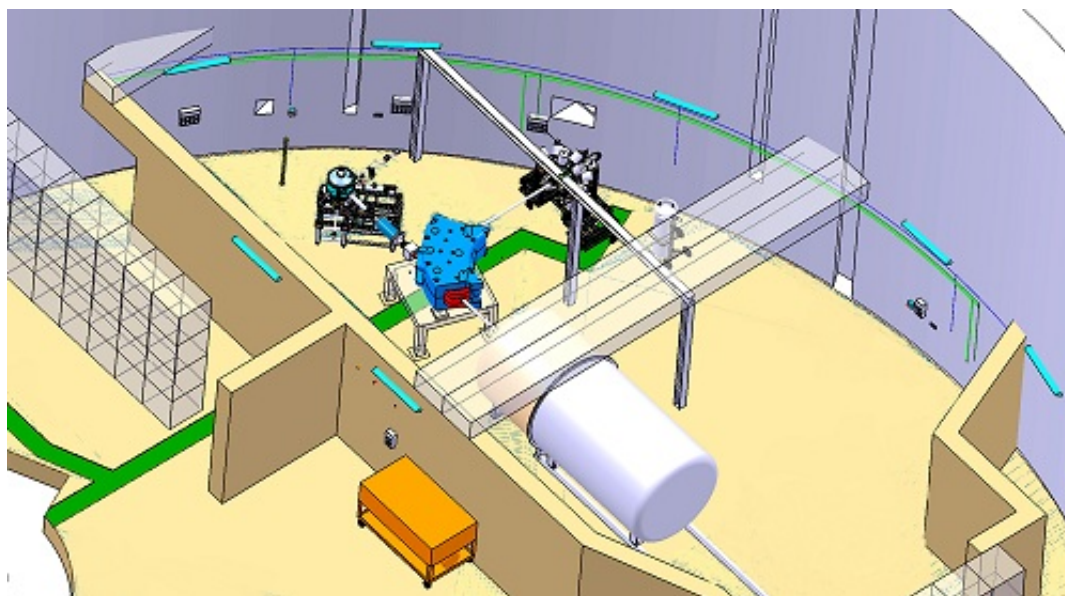
The design team was in charge of the studies of the integration and definition of the ion sources (LMIS and ECR) to be installed in the terminal of the electrostatic accelerator of the Andromede project. The team was also in charge of the study of the beam control systems along the line, the detector EEM and the chamber of the analyzing magnet along with the implementation study of this Equipex within the IGLOO building.



LMIS and ECR ion sources



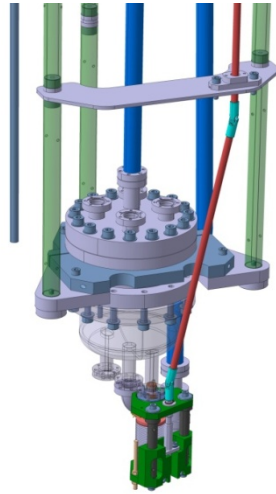
détecteur EEM



Model of the Andromede facility

ECOMI Thin Films

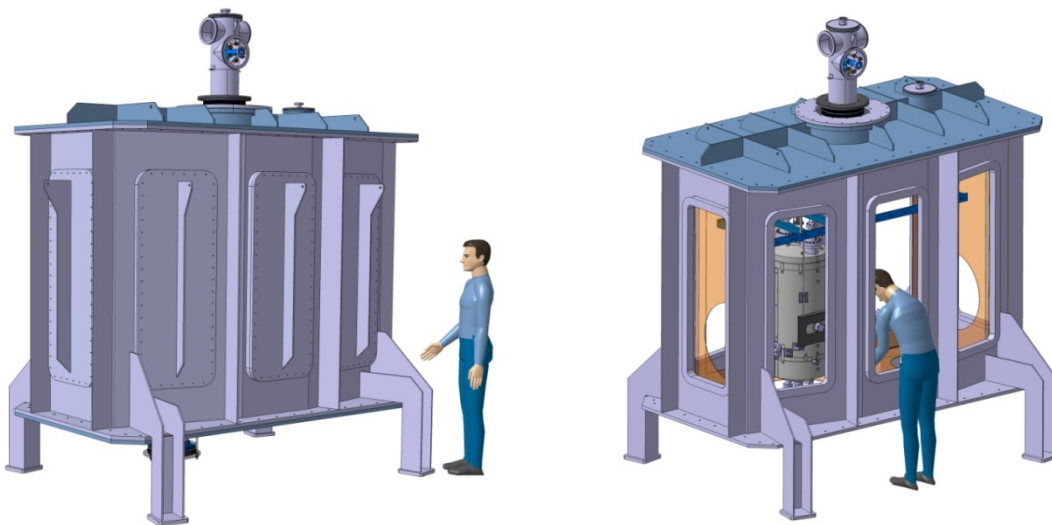
In the framework of the R&D studies on superconducting multilayered materials ECOMI, the design team has designed an experimental device consisting in a test cavity, an instrumentation chamber and a RF module with a variable penetration antenna to ensure an optimal coupling with the cavity.



Experimental device ECOMI

TIARA

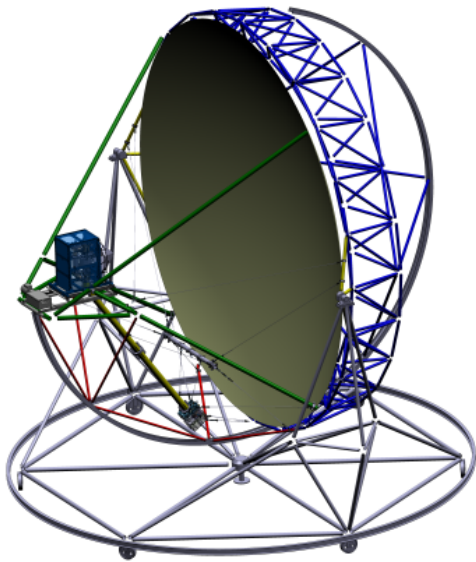
In the framework of the European R&D program TIARA, the design team participated in the study of a test cryostat which could integrate any type of RF superconducting low beta cavity with its equipment. Its design was developed on the basis of existing cavities and other ongoing development projects on different European accelerators (SPIRAL2, ESS, IFMIF, EURISOL, MYRRHA ...).



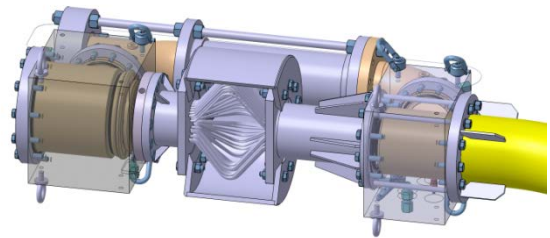
Test cryostat for a low Beta equipped RF cavity

TACSOL

Up to 2012, the R & D studies on thermoacoustics were conducted in the laboratory. The design team notably contributed to the mechanical design of a refrigeration machine powered by solar energy in the framework of the project TACSOL.



Machine installed in the parabola



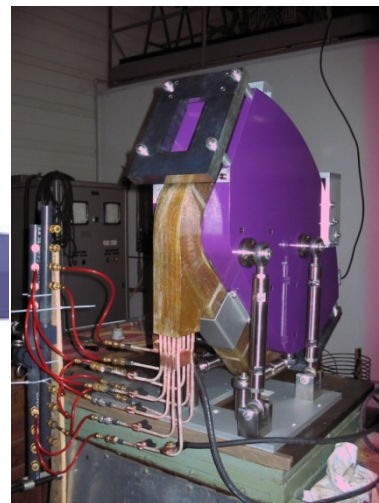
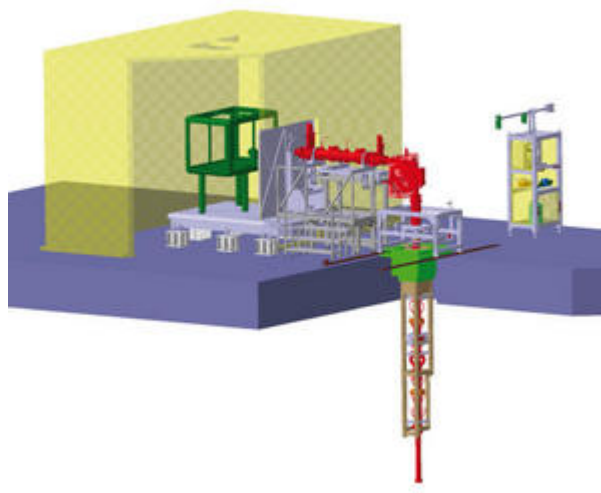
Motor loop



Exchanger

GUINEVERE

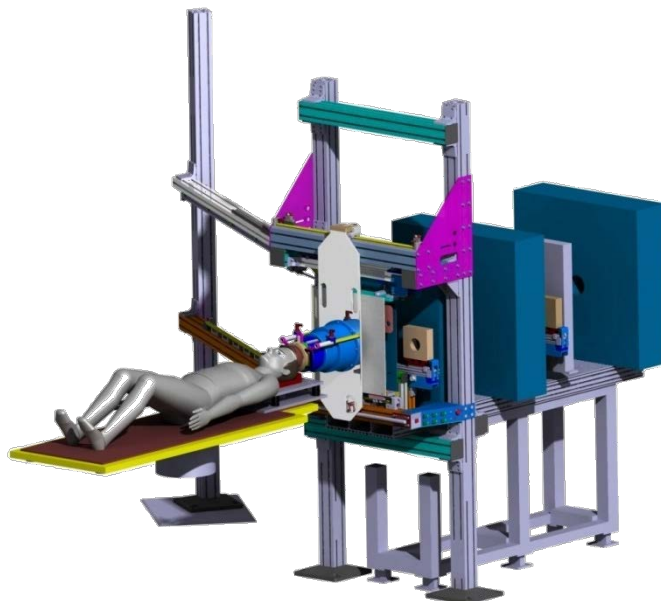
From 2007 to 2009, the design team contributed to the success of the project Guinevere, a demonstrator for MYRRHA, with the manufacturing of the dipole magnet with its cooling system and the interfaces for its mobility. This dipole ensures the 90 °deflection for the deuterons and makes the connection between the ion source (horizontal line) and the reactor (vertical line).



The dipole magnet Guinevere

The proton-therapy center of Orsay

The design team was in charge of design studies and production follow-up of several devices to medicalize the proton beam delivered to the treatment rooms of the proton-therapy center of Orsay.



Equipment of a treatment room at CPO