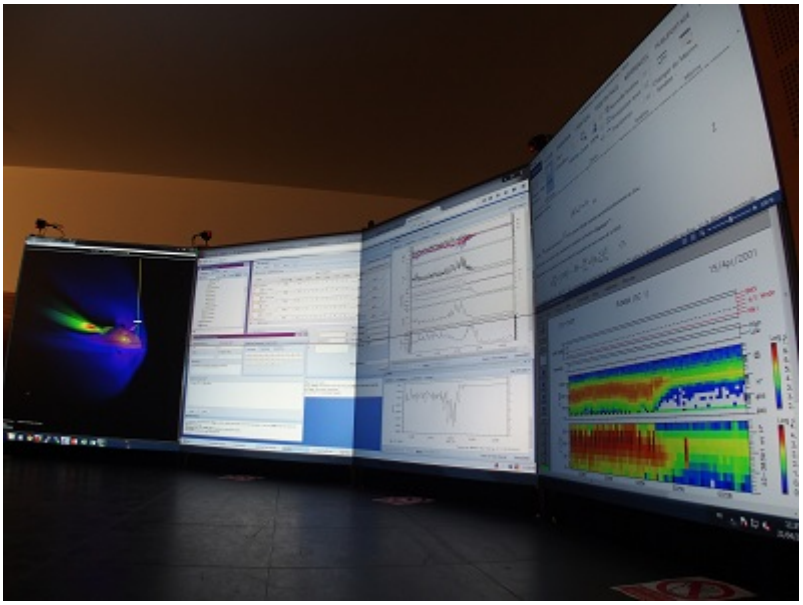
IMMERSIVE PLATFORM MIRE

MIRE: Immersive Wall for Research and Education

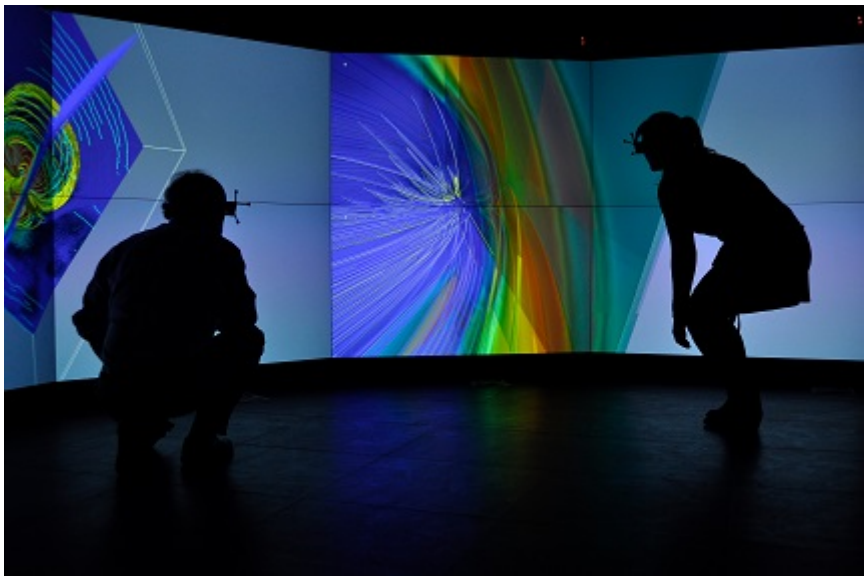
The MIRE platform is a multi-screen visualisation system hosted by the PIT. This installation is capable of displaying a total of 16 million pixels in active stereoscopy over a total area of 6 m x 1.7 m.



It is made up of 8 BARCO OLS-721 Full HD 70" modules equipped with overhead projectors. Real-time graphics rendering is possible thanks to a cluster of PCs equipped with NVIDIA K5000 graphics cards.

This platform is developed as part of the "Equipex Digiscope" project to support OVSQ's research and teaching activities on the following themes:

- Visualisation and post-processing of data from heavy simulations
- Collaborative decision-making
- Teaching aid
- Concurrent engineering applied to instrumental developments



Software available

- Autodesk Inventor
- CATIA V6 (Dassault Systèmes)
- IDM CIC, VTS, Stela (CNES)
- Matlab, Scilab
- MS Office
- Paraview, VisIt, VMD
- DIGISCAPE telepresence
- Unity, BlenderVR

Equipment

- 3D stereoscopic glasses
- Movement tracking system
- ClickShares
- 5.1 sound system
- 3D mouse
- Touchscreen tablets
- Touchscreens
- Webcams
- Polycom

Digiscope Project

Winner of the "Equipment of Excellence 2010" call for projects, Digiscope is a high-performance visualisation infrastructure for collaborative interaction with massive data inputs and calculations. This 22 million euro project is coordinated by the Fondation du Campus Paris-Saclay in partnership with Paris-Sud University, CEA, CNRS, INRIA, Institut Telecom, Centrale-Supélec, ENS Cachan and UVSQ.

The objective of Digiscope is to deploy a set of platforms with interactive video walls and immersive virtual reality rooms interconnected by high-speed networks and telepresence resources that allow remote collaboration.
Ultimately, the Digiscope network will integrate ten sets of display equipment in the various partner establishments.