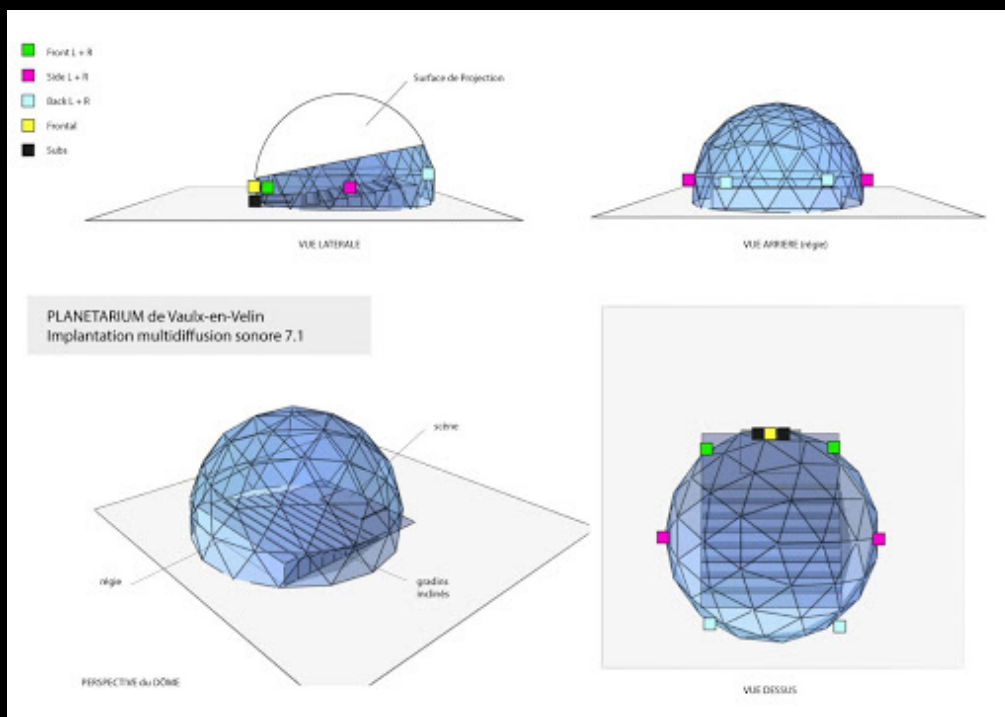


# IMMERSIVE CALL FOR PROPOSALS - TECHNICAL INFORMATIONS

## VAULX-EN-VELIN PLANETARIUM

- The Planetarium is equipped with a Dome of 15m diameter with 360° panoramic views over 170° of equatorial opening with a 10° tilt towards the front.
- The hall is configured with a stage space of approximately 8x4m facing rows of seats with a capacity of 150 fixed seats.
- The maximum video resolution is 4K30Hz in real time / 8K120Hz in pre-rendering and active 3D.
- The sound multicast is in 7.1.
- No aerial hanging system is possible.



## THE LABLAB - VILLEURBANNE

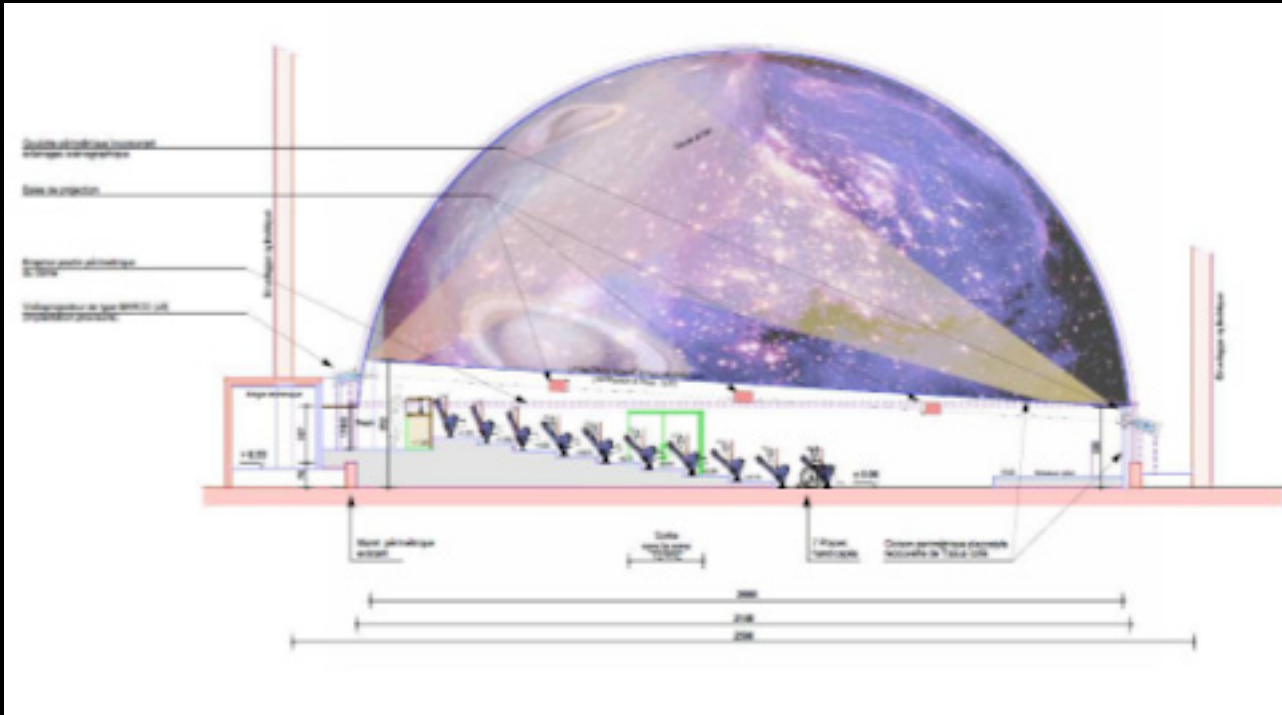
- The LabLab has a cubic and white cave offering an immersive projection on 3 sides (1 video projector per side) and on the floor (2 video projectors).
- Each video projector has a resolution of 720p.
- The sound multicast is in 4.1.
- The stage measures 10m x 10m. The Studio does not accommodate an audience. It allows to carry out preliminary technical tests.
- The LabLab also has a fully-equipped workshop available to the teams that are hosted, allowing them to make scenography elements or any other object necessary for the creation.

## PARIS PLANETARIUM

### THEATRE

21.5m (70'6") in diameter, white reflective screen made of punched aluminum plates, 180° meridians and 360° horizon. 265 seats, including 7 available for the mobility impaired.

Screen is 5° forward-tilted.



### VIDEO PROJECTION

The video projection system is based on 10 Sony GTZ 280 video projectors (2500 lumens each) for an equivalence of 8K pixels on a meridian.

The whole hemispherical screen can be used for image or video projection; that is called "fulldome" projection. It inherently differs from the usual "rectangular" projection used for TV or other common video projection systems, and thus requires visual contents to use an appropriate mathematical projection.

Delivery formats allowed for Fulldome video contents :

- Image sequence
- Dimensions (in pixels)

Final renders: 2048 × 2048 up to 8192 × 8192

Tests: 512 × 512 up to 4096 × 4096

- JPG images (final deliveries call for low compression rates, which retain better quality)
- PNG images (without alpha) for sequences under 3 minutes
- For final deliveries, other formats might be accepted on request

Delivery formats allowed for still Fulldome images :

- PNG, JPEG or TIFF format (same recommendations than image sequences regarding compression)
- Alpha supported (when selected format supports it)
- Dimensions (in pixels)
  - Fisheye: 2048 × 2048 up to 16384 × 16384, down to 512 × 512 for tests
  - Equirectangular: 4096 × 2048 up to 32768 × 16384, down to 1024 × 512 for tests

• Auxiliary projector :

- An auxiliary CASIO AX-J257 (3 000 Lumens, 1 280 × 800, VGA or HDMI input) video projector is available.
- It can display a 10m-wide (32') picture in front of the viewers, with a slight deformation.

## AUDIO

The system has 7 channels, arranged in a typical 5.1 configuration plus an additional zenithal speaker. All channels (except LFE) are always full-band and automatically routed to the LFE channel with the right crossover frequency. LFE channel should be used only for additional bass effects, if needed.

All channels are independent.

Delivery formats allowed for final audio contents:

- PCM (WAV), 48kHz, 16 bits signed little endian (system's native format, any other format will eventually be converted into this one, but it is not the most convenient for transfers)
- PCM (WAV), 48kHz or more, 16 bits or more (integer or floating point), signed or unsigned, little or big endian
- FLAC, 48kHz or more, 16 bits or more

## STAGE LIGHTING

• DMX console (manual , located backstage): Theater Technisch Lab Spring 24 channels v3

• Indexable RGB LED strip right below the screen horizon, directed at the ceiling/screen (16 RGB groups)

• 15 fresnel lens "spot" projectors, dimmable from the DMX console

• 7 dimmable CEE 7/5 wall sockets on stage, 230V/50Hz, 1000W max each, dimmable from the DMX console

• More non-dimmable CEE 7/5 wall sockets on stage and backstage, 230V/50Hz

• RJ45 ethernet network on stage and backstage (no Internet connection)

Devices controlled by the DMX console can also be controlled using a script.

## NANTES PLANETARIUM

- The Planetarium is equipped with a Dome of 8m diameter with 360°, it is unperforated and made of fiberglass.
- The hall is flat and concentric and has two rows of seats on the periphery with a seating capacity of 60 fixed seats.
- The stage space is in the centre of the hall, a circle 3m in diameter.
- The maximum video resolution is 2.5K in real time (4K playback possible). Projection by 2 F35 projectors face to face.
- Sound diffusion is in 5.1.
- Fulldome videos supported 4K in 30 frames per second.

## SOCIETY FOR ARTS AND TECHNOLOGY [SAT] - MONTRÉAL

A pioneer in the field of immersive creation, the SAT inaugurated the Satosphère in October 2011: the very first permanent immersive modular theatre, dedicated to artistic creation and visualization activities. With a diameter of 18 metres and a height of 11.5 to 13 metres, this dome forms a 360-degree spherical projection screen and can accommodate up to 350 spectators.

The Satosphère is a new creative tool for tangible, inclusive, and immersive human experiences, placing the audience at the very heart of the audio-visual experience. Whether it's for audio, visual film, architectural visualization, dance, or game projects, you're invited to come explore new conceptual and sensory territories on a human scale.

**The Satosphère's key points :** Modular screen configuration : 180°, 210° and vertical 230° by 360° / 18m in diameter / 11.5 to 13m high / 8 video projectors / 157 speakers