

<b>Project</b>	<b>Si Poteris Narrare, Licet</b>
<b>Customer</b>	Epidemic Paris
<b>Format</b>	Interactive installation with 360°-projection and dynamically generated surround sound
<b>Task</b>	Project leader audio Architecture and implementation of the real-time audio rendering software Specification audio recording and reproduction hardware System integration
<b>Status</b>	Realized 2002
<b>Display</b>	EXIT Festival Paris 2002 VIA Festival Maubeuge 2002 Future Cinema, ZKM Karlsruhe 2003 Medi@Port Festival Athen 2004 Cinémas du futur, Lille – Capitale Europeenne de la Culture 2004 Festival d'Avignon 2005
<b>Info</b>	<a href="http://epidemic.cicv.fr/geo/art/jmb/prj/i_cinema/index.html">epidemic.cicv.fr/geo/art/jmb/prj/i_cinema/index.html</a>

## Concept

The projection environment of iCINEMA is a large inflatable dome, which currently is 12 meters in diameter and 9 meters high. This enables an audience inside of about 50 persons. In the centre of this dome there is a column on which a high-resolution video projector is mounted. A computer controlled motor system allows this projector to rotate 360 degrees and move up and down approx. 90 degrees. As a result the projected rectangular area, which is approx. 2 meters wide, can be accurately moved anywhere over the whole screen surface of the dome. Most importantly, the movement of this projector is controlled by one of the visitors with a simple device in his hand that he can point in whatever direction he wants to place the image. In other words, the projector becomes a flashlight that illuminates a portion of a fully surrounding dark yet present space of imagery. The viewer interactively steers this cinematographic flashlight to explore this space, moving from one area to another, lingering on details that interest him, fulfilling his individual path of curiosity and discovery.

We call this technology iCINEMA because the projected imagery is a digital film, a recording of actors, scenery, special effects and or graphics which is stored in a computer as a fully surrounding 360 degree image in an ultra-high resolution (4k x 4K pixels) fisheye format. This fisheye movie runs like a normal film at 25 frames per second. The iCINEMA software enables the viewer to interactively move his frame of view anywhere inside this fisheye movie, and when projected on the dome this software also corrects the fisheye distortion so that the image looks as if it was taken with a normal film camera.

The 6 minutes film project by the renowned French artist Jean Michel Bruyère is the first iCINEMA experience.

From a purely technological point of view, this project embodies a unique convergence of traditional cinematic and cutting edge digital technologies. The completely custom projection software and hardware system embodies a highly innovative paradigm for the cinematic experience which is a totally appropriate expression of the new possibilities of the digital medium.

