# Only the best will do in virtual reality

Johan Besnainou of specialist VR and simulation integrator Antycip Simulation tells *Lindsey Reynolds* about the company's role in research and education in the VR CAVE sector.



Johan Besnainou: "Universities want the best they can get"

The VR CAVE (Cave Automatic Virtual Environment) is a powerful tool for research and education and fast becoming a must-have for universities the world over.

These are true multi-disciplinary facilities used university-wide to research theoretical and real-world problems, visualise complex data, explore the applications of the technology and produce skills needed by industry.

They enable you to walk through a virtual jet engine or a yet-to-be-constructed building to spot potential design flaws, and they are transforming the way students learn – doing for medical training what flight simulation did for aviation, for example.

Behind many of Europe's cutting-edge VR CAVEs is Antycip Simulation, a specialist integrator of professional-grade simulation

and VR solutions and Europe's leading supplier of COTS (commercial off the shelf) simulation software, projection and display solutions and related engineering services.

Antycip Simulation provides very large systems incorporating projection on to glass screens with tracking solutions. Regional director for France and Spain, Johan Besnainou explains: "These could be a large canvas with one wall of 4m to 12m or two to five side installations. How many depends

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> **Johan Besnainou**

on the specific installation but will always include the ground with one to three faces plus the top.

"We also do moveable doors to give them flexibility on the number of faces. One of our HE customers, for example, has a 4m x 4m cube, but when you open the door it creates an 8m screen."

The market is growing every year. Besnainou explains: "The first boom came with the movie *Avatar*; the second with the head-mounted display. Now it's 4K. Today's benchmark technology is 4K laser at 120Hz."

"A university's goal is to have a fantastic tool for research projects at the highest quality," he adds. "They want the best they can get and we can do things today that wouldn't have been possible when we started out. It was impossible to visualise 4K 15 years ago, but today it is here and everyone wants it."

VR is increasingly accessible, with an entry point of €50,000 for a basic system. A typical set-up is €300,000-€400,000, while some projects can top €1m – for these, European funding is usually a must.

These projects are not paid for with a university's own money, Besnainou explain. They are funded by research grants, Government and partnerships with industry across all verticals. The quality of the solution is important – with the nuclear industry, for example, the highest quality is mandatory. Making this happen requires experts and that's where Antycip Simulation comes in.

"We provide that expert turnkey service," explains Besnainou. "Once a university comes to us, we manage the whole process for them. We do everything – the integration, installation, software and ongoing maintenance." ■