



## **Real-time 3D Helps to Finally Solve the Mystery of the Great Pyramid of Kheops!**

### ***The Only Great Pyramid Construction Theory Presented in Stereoscopic, Interactive 3D Thanks to Dassault Systèmes' Solutions***

*A real-time 3D experience also shared at: [www.3ds.com/khufu](http://www.3ds.com/khufu)*

**Paris, France March 30 2007** – Dassault Systèmes (DS) (Nasdaq: DASTY; Euronext Paris: #13065, DSY.PA), a world leader in 3D and Product Lifecycle Management (PLM) solutions, announced that it today held a world premiere unveiling of the scientifically proven Great Pyramid construction theory with its creator, architect Jean-Pierre Houdin.

Dassault Systèmes' real-time 3D solutions enabled Jean-Pierre Houdin to model and explore the pyramid in 3D and run simulations confirming his theory that the pyramid was built from the inside!

The secret of the Great Pyramid, the sole survivor of the Seven Wonders of the World, has fascinated people throughout time. Countless theories exist as to how it was built, but none stands up to analysis. In 1999, Houdin had an insight and decided to devote himself to developing his theory. Eight years of passion and research ensued, whereby he imagined the construction site of Kheops as the first industrial construction site in history. To further refine and test his theory, he called on Dassault Systèmes to help. As part of its "Passion for Innovation" sponsorship programme, DS decided to help Houdin solve the 4,500-year-old mystery with its real-time 3D solutions.

#### **Real-time 3D at the service of history and science**

DS's real-time 3D solutions allowed Houdin to establish the first theory ever explaining the construction of the Great Pyramid from start to finish. The theory is founded on three foundations:

- the use of an outside ramp to build the first 43 metres of the pyramid;
- the use of an internal spiral ramp running behind the faces of the pyramid to complete the construction; and
- the use of the Great Gallery to accommodate an ingenious system of counterweights to lift the heavy granite ceiling rafters (up to 63 tonnes) in the King's Funeral Chamber.

"Jean-Pierre Houdin's theory is not only interesting; it is coherent and revolutionary. Take the builders of that time seriously, he sees them as grand masters of construction, as real engineers," declares Egyptologist and pyramid specialist Rainer Stadelmann, ex-director of the German Institute of Archaeology in Cairo. Bob Brier, PhD, Egyptologist and world-renowned expert in the field of mummies adds: "Half-baked theories have been put forward about the Great Pyramid and until now none passed the test of sustained analysis. Jean-Pierre Houdin's theory is worth examining simply because of his rigorously scientific approach, which he supports with a large volume of field-based evidence." Both experts will accompany Houdin on a scientific expedition to the site.

Other participants in the March 30 conference include: Hui Duong Bui, member of the French Science Academy and research director at Poytechnique, who in 1986 conducted onsite Kheops microgravimetry measurements for the EDF Foundation; Marc Buonomo, project manager for Eiffel and the Millau viaduct; and Craig B. Smith, who has studied the construction of the Kheops pyramid in the light of modern project management techniques.

The final step for Houdin and Dassault Systèmes will be to prove the theory in real-life with non-invasive verification techniques conducted on the Kheops site.

### **The largest real-time 3D virtual reality auditorium in the world, a first for Dassault Systèmes and the Géode**

Seven computers running Dassault Systèmes' 3D Virtools solutions are linked in a network to recreate the Kheops construction site in 3D, exactly as it was 4,500 years ago. The system allows the presenter to move about the virtual site freely in response to the audience's questions. This is a first, linking the real and virtual worlds via an immersive, interactive 3D experience.

### **Real-time 3D tools. A new era in communication**

The event at the Géode is more than a simple demonstration. It marks a revolution, positioning real-time 3D as the communications medium of the 21st century. The universal language of 3D fosters information sharing: today's conference and the [www.3ds.com/khufu](http://www.3ds.com/khufu) website showcase the same real-time 3D technologies, enabling people all over the world to access the heart of the pyramid at will and participate in the revelation of Houdin's theory.

Dassault Systèmes has always been ahead of the times regarding 3D and its usage, with innovative applications in domains such as science, research, education and archaeology. "The Kheops event demonstrates the diversity of applications possible with "3D For All", our strategy designed to benefit the general public's daily lives with realistic interactive 3D experiences," explains Dominique Florack, senior executive vice president, Products R&D, Dassault Systèmes.

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### **About Dassault Systèmes**

As a world leader in 3D and Product Lifecycle Management (or PLM) solutions, Dassault Systèmes brings added value to more than 90,000 customers in over 80 countries. A pioneer in the 3D software market since 1981 Dassault Systèmes develops and markets PLM application software and services that support industrial processes and provide 3D vision of the entire lifecycle of products from conception to maintenance. The Dassault Systèmes portfolio consists of CATIA for designing the virtual product- SolidWorks for global 3D mechanical design- DELMIA for virtual production- SIMULIA for virtual testing and ENOVIA for collaborative global lifecycle management, including ENOVIA VPLM, ENOVIA MatrixOne and ENOVIA SmarTeam. Dassault Systèmes is listed on the Nasdaq (DASTY) and Euronext Paris (#13065, DSY.PA) stock exchanges. For further information, visit <http://www.3ds.com>

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