

## Architect says pyramid was built with spiral ramp

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PARIS – A French architect claimed Friday to have uncovered the mystery about how Egypt's Great Pyramid of Khufu was built – with use of a spiral ramp to hoist huge stone blocks into place.

The construction of the Great Pyramid 4,500 years ago by Khufu, a ruler also known as Cheops, has long befuddled scientists as to how its 3 million stone blocks weighing 2.5 tons each were lifted into place.

Ending eight years of study on the subject, architect Jean-Pierre Houdin released his findings and a computerized 3-D mockup showing how workers would have erected the pyramid at Giza outside Cairo.

The most widespread theory had been that an outer ramp had been used by the Egyptians, who left few traces to help archaeologists and other scientists decode the secret to the construction.

Houdin said he had taken into account the copper and stone tools available at the time, the granite and limestone blocks, the location of the pyramid and the strength and knowledge of the workers.

According to the architect's theory – shown in a computer model available at [www.3ds.com/khufu](http://www.3ds.com/khufu) – the builders put up an outer ramp for the first 140 feet, then constructed an inner ramp in a corkscrew shape to complete the 450-foot structure.

Houdin also postulated that the King's Chamber was hoisted into place through a system of counterweights.

Houdin said he plans to verify his theories through non-invasive on-site tests.