

The Australian Institute of Physics



www.aip.org.au

The Australasian College of  
Physical Scientists and Engineers  
in Medicine



www.acpsem.org.au

## **2007 Physics Youth Lecture**

### ***Jeni: A tale of Modern Medicine and Ancient Egypt (or, how to unwrap a mummy using X-rays)***

by

**Dr Stephen Hughes**

**Department of Physical and Chemical Sciences, Queensland University of  
Technology, Gardens Point, Brisbane**

Every day across the globe, thousands of people climb inside X-ray computer tomography (CT) scanners to have cross-sectional X-ray images of their bodies taken. X-ray CT images enable health professionals to see what is going on inside the body in two, three and four dimensions. This talk describes a project in which an X-ray CT scanner, a modern piece of medical technology, was used by medical physicists, doctors and archeologists to peer inside the body of an ancient Egyptian mummy. The mummy, Tjenmutengebtiu (which we will shorten to Jeni) lived in the Egyptian city of Thebes during the 22nd dynasty (c. 945-715 BC). The purpose of this joint British Museum and St. Thomas' Hospital project was to use X-ray images to effectively "unwrap" a mummy to learn more of the embalming secrets of ancient Egypt.

*The 2007 Physics Youth Lecture is jointly sponsored by the Queensland branches of the Australian Institute of Physics and the Australasian College of Physical Scientists and Engineers in Medicine.*

***The Lecture will be presented at various Queensland venues 16 -24 August 2007.  
Please visit the website below for the tour schedule & local contacts:***

**<http://qld.aip.org.au>**

*[Those without web access can telephone (07) 4631 2361 for more information]*