LIBRARY LATES

Thinking 3D

7.15pm: Parallel lines down the centuries

Dr Christopher Hollings

For 21 centuries, mathematicians worried about a fundamental assumption made by Euclid of Alexandria: that parallel lines must meet at infinity. Could geometry 'work' without this assumption? The answer caused mathematicians to reassess the nature of mathematics itself.

7.45pm: Plans and elevation: the development of architectural drawings

Dr Karl Kinsella

Dr Karl Kinsella introduces a 12th-century manuscript which explores the mystical visions of the prophet Ezekiel and contains some of the earliest architectural drawings in existence.

8.15pm: Getting to the heart of cardiac disease: a multi-disciplinary effort to image the heart in 3D

Dr Kerstin Timm & Dr Justin Lau

A picture can be worth a thousand words, but only the right picture can help a cardiologist find the best course of treatment for a patient with heart disease. Discover how researchers are using magnetic resonance imaging (MRI) to acquire images that show how the heart works on both a whole organ and cellular level.

8.45pm: Particles in space

Dr Donal Hill

Join Dr Donal Hill for a tour of the invisible, as he describes how particle detectors measure 3D information to help uncover the secrets of tiny fundamental particles.

9.15pm: Leonardo's thoughts on mechanics and useful inventions

Dr Matthew Landrus

6,000 surviving notes and drawings reveal Leonardo da Vinci's way of thinking. This talk focuses on Leonardo's second book, *On Mechanics*, and explores how he later applied mechanical laws to studies for 'useful inventions'.