

## Members Talks

7.30 p.m. 5<sup>th</sup> February 2014

### James Clerk Maxwell

**Professor Daniel Gorman.**



#### **Biography**

*Danny Gorman comes originally from Hamilton and upon leaving school completed an engineering apprenticeship through Honeywell (Newhouse) and Rieter Scragg (Macclesfield). He gained his BSc in engineering from Strathclyde University in 1974 and PhD in 1977. His first post was in 1977 as a lecturer of engineering science at Trinity College Dublin. Between 1981 and 1989 he lectured in engineering at Queen Mary College, University of London. Between 1989 and 1995 he was professor and head of Mechanical and Offshore Engineering at Robert Gordon University and in 1995 he took up a professorship in engineering at Aberdeen University. In 2001 he moved to Strathclyde University and retired in 2009. In his retirement he is very active in public engagement with science – he is an active STEM Ambassador and has founded the Kilmarnock Engineering and Science Society.*

#### **Abstract**

In his talk to the RPSG, Danny will describe aspects of the life and work of James Clerk Maxwell (1831 -1879) of Glenlair (nr Castle Douglas) who was a Scottish physicist and mathematician. Maxwell's most prominent achievement was formulating classical electromagnetic theory in which he unified electricity, magnetism and light. He did however contribute significantly to other fields of physics, in particular colour perception and statistical mechanics. Maxwell is considered by many physicists to be the 19th-century scientist having the greatest influence on 20<sup>th</sup> and 21<sup>st</sup> century physics and his scientific contributions are considered by many to having the same impact as those of Isaac Newton and Albert Einstein.

# The Antikythera Mechanism

## Professor David I. Stott



### Biography

*Emeritus Professor of Molecular Immunology and Honorary Senior Research Fellow, Institute of Infection, Immunity & Inflammation (3Is), University of Glasgow. After receiving his Ph.D. in Biochemistry, University of Cambridge David has worked on research and teaching in Immunology at a number of institutions including the ARC Institute for Animal Physiology, Babraham, Cambridge, Basel Institute for Immunology, Switzerland. David has also been a visiting lecturer, University of Havana, Finlay Institute for Vaccine Research and Institutes of the West Havana Scientific Park, Havana, Cuba. His research interests include molecular and genetic mechanisms of the immune response in health and disease, including autoimmune diseases and cancer; development of novel types of vaccines against viruses and breast cancer using recombinant gene technology.*

### Abstract

A Roman merchant ship laden with Greek statues, amphorae, jewels and coins was wrecked in a storm north of Crete over 2000 years ago. It was discovered in 1900 by Greek sponge divers and the hoard was found to include parts of a mechanical device that predicts the movements of the heavens far into the future. Named the Antikythera Mechanism, the sophistication of this device was such that some have called it the first mechanical computer. It revolutionised thinking about the technological abilities of the ancient Greeks. My talk will describe the discovery of this device and the detective story of the attempts to unravel its purpose, culminating in the building of a working model. The talk should be of interest to anyone interested in archaeology, astronomy, horology and engineering of small mechanical devices.