



# The Five Ogden questions in physics

*Sir Arnold Wolfendale Lecture Theatre,  
18 September 2012*

- 2:00-2:05**      **Introduction**  
*Professor James Stirling FRS*
- 2:05-2:30**      **What is the dark matter, how much is there  
and where is it?**  
*Professor Carlos Frenk FRS*
- 2:30-2:55**      **What is the dark energy, when and where was  
it generated**  
*Professor Shaun Cole*
- 2:55-3:25**      **How do the masses of the elementary  
particles arise?**  
*Professor Nigel Glover*
- 3:25-3:35**      **Presentation to Professor Peter Higgs FRS**  
*Professor Chris Higgins*
- 3:35-4:25**      **Tea and Cosmic Origins movie show**
- 4:25-4:50**      **What are the masses of the neutrinos and  
how have they influenced the evolution of the  
universe?**  
*Professor Silvia Pascoli*
- 4:50-5:15**      **What is the origin of planets and life?**  
*Professor Martin Ward*
- 5:15-5:30**      **Summary and discussion**  
*Professor James Stirling FRS*

