**Studium 2014**

**Title**

The Art of Computer Programming

**Synopsis**

What is the connection between the art of Piet Mondrian, the fractals of Benoit Mandlebrot, ciphers, ammonites, the collision of galaxies, and samples of classic rock music? The answer is *code*. Computers are increasingly interwoven into the fabric of our cultural lives, and a fantastic range of opportunities exists for creative expression (and possibly lucrative employment) if you know the language to manipulate this technology. This lecture is an eclectic tour of the art of the possible. No prior programming experience is required.

**Short version biography**

Dr Andrew French teaches Mathematics, Physics and various enrichment activities at Winchester College. His current research interests span the use of computer programming in secondary education, models of gravitational and other physical phenomena, and artistic visualization of Mathematics.

**Longer version biography**

Dr Andrew French teaches Mathematics, Physics and various enrichment activities at Winchester College. He studied Experimental & Theoretical Physics at Cambridge University 1997-2001 and followed this with a research Masters in quantitative modelling of fluid flow at the BP Institute, also at Cambridge. He then worked as an analyst and consultant for BAE Systems 2002-2010, specializing in aspects of Radar and Meteorological equipment in land-based and maritime defence systems. During this period he received a PhD from University College London on Target Recognition Techniques in Phased-Array Multifunction Radar. His current research interests span the use of computer programming in secondary education, models of gravitational and other physical phenomena, and artistic visualization of Mathematics.