Cambridge Physics Centre presents:

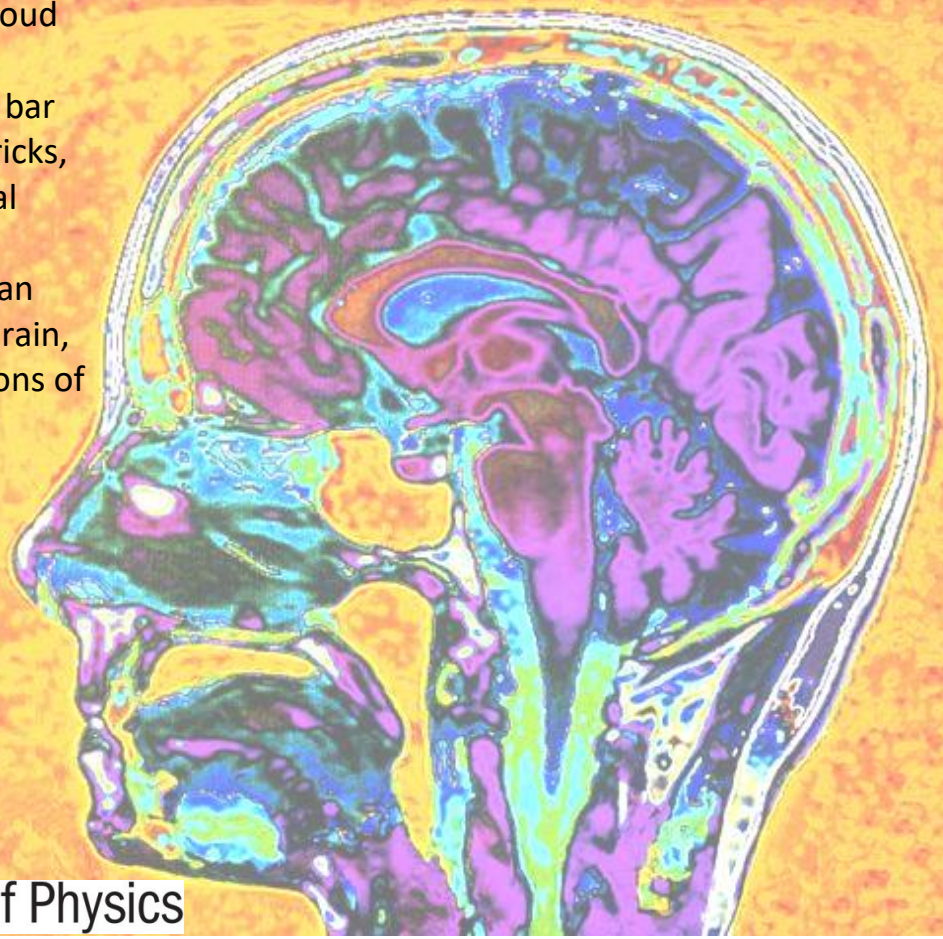
Magical Magnetic Resonance Imaging

by Dr Richard Ansorge of the Cavendish laboratory

Clinical MRI has been developed in the last 20 years and is the best tool we have for imaging structures in patients. Each scan involves very complicated physics and depends on many different technologies: superconducting magnets; computing; and power amplifiers similar to those used for loud concerts.

MRI depends on two obscure properties of protons: they behave like bar magnets and those magnets spin like gyroscopes. Using very subtle tricks, the very weak effects that result can be manipulated to give the signal needed.

MRI is extraordinarily versatile, giving superb soft tissue contrast. It can image flow in blood vessels, map the nerve fibre connections in the brain, measure chemical composition, detect tumours, highlight active regions of the brain during cognitive tasks, and much more.



6pm on Tuesday 15th November 2016

Pippard Lecture Theatre, Cavendish Laboratory,
J J Thomson Avenue, Cambridge
Directions at http://www-outreach.phy.cam.ac.uk/cpc/

No need to book, just turn up

Sponsored by:
Cavendish Laboratory

IOP Institute of Physics