



STIMULATING
PHYSICS
NETWORK

2018 IOP Big Day Out at Cosford

Mon 25 June 2018, 09:30 – 15:30

PROGRAMME

10.00 - 10.15: Welcome and registration

10.15 - 10.30: Introduction

10.30 - 11.30: Workshop 1

11.30 - 11.45: Break

11.45 - 12.45: Workshop 2

12.45 - 13.30: Lunch

13.30 - 2.30: Workshop 3

2.30 - 3.30: Speed Networking*

3.30 - 3.45: Goody bags and close

*Speed networking will showcase several useful ideas in 10 min slots each. Last year we had useful contributions from delegates and if anyone has a "show and tell" to share please get in touch with Tom Dawson at physicsiseasy@googlemail.com

WORKSHOPS (choose 1 from each session)

Workshop 1A: RAF 100 - The IOP has produced a set of eight STEM activities on behalf of the RAF, whose centenary it is this year. They are linked to the 11-16 curriculum, but each stands on its own. These activities are all downloadable, free of charge, at <https://www.raf100schools.org.uk/>. In this session, we'll demonstrate and give you some hands-on time with them.

Workshop 1B: Neodymium Magnets - This workshop will feature various demonstrations and experiments where neodymium magnets can be used. The ideas can be integrated into schemes of work at key stages 3, 4 and 5.

Workshop 1C: Do Physics - A carousel of short experiments suitable as starters, investigations or bait to draw students into greater involvement in Physics. They are easily set up and rich in intriguing Physics designed to inspire, provoke and engage. As well as trying experiments, we'll consider ways to use these with students to support careers.

Workshop 2A: Rockets - Build your own "rocket" launcher. You can then use the compressed air launcher in the classroom to engage students with the design of the rockets. Through modifications such as adding fins or altering the shape of the nose cone, students can theorise and then try out how a rocket's flight path can be affected.

Workshop 2B: Equipment provider - Come and see how new physics equipment can be used in the classroom to inspire your pupils.

Workshop 2C: Do Physics - A carousel of short experiments suitable as starters, investigations or bait to draw students into greater involvement in Physics. They are easily set up and rich in intriguing Physics designed to inspire, provoke and engage. As well as trying experiments, we'll consider ways to use these with students to support careers.

Workshop 3A: Thermal Physics - Come and discuss and take part in a number of hands on activities to teach this topic including ideas on kinetic theory, specific and latent heat and energy transfer. Small make and take of easy immersion heaters for use in the classroom. Lots of engaging ideas about this KS3, 4 and 5 topic.

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