

# AS Revision Day a great success

On 30th March 2004, 240 students and teachers came together for intensive, but enjoyable revision of the AS part of the Advancing Physics course.

The day included:

## Four Revision Lectures

David Richardson (local IoP Network coordinator) started with Communication, using animated PowerPoint slides to clarify and explain ideas. He backed this up with exciting and relevant experiments - including electrocuting a sausage!

Jonathan Harris from the Bristol University Aerospace Engineering Dept covered Designer Materials. Sharing his insight into the microscopic structure of materials, he smashed brittle ceramics and demonstrated a composite golf club. This allowed pupils to cement their ideas of how materials work and behave.

With her characteristic enthusiasm and energy, Helen Reynolds (science week lecturer 2002) discussed Waves and Quantum Behaviour. Using audience participation, some students experienced being a phasor, and she showed how the different phenomena of waves fit together.

Laura Grant (Faraday Lectures presenter 2003) covered Space and Time in her usual exciting and involving way. Using radio controlled cars, large vector arrows, three types of rocket and a

strobe light, the students were led through how to describe motion. The students' enthusiasm showed - 90 of them continued the experiments by launching rockets outside the department.

*"The AS Revision day was a marvellous summary of the course. The passionate lecturers and fun demonstrations made the day highly enjoyable."*

## Question Panel and Maths Top Up

Pupils were able to talk to a group of science communicators, reporters, PhD and undergraduate students, teachers, the author of the AS course and the Bristol Physics Admissions tutor. Their questions reflected not only an interest in developing their exam technique, but also physics career opportunities. Some also went to a maths top up session, giving them a chance go over formulae used in the AS exams.

## Fusion in the 21st Century

Finally, Chris Warrick (JET, Oxford) described how Physics is influencing the future and could provide a solution to growing global energy consumption. This made excellent links to the A2 course, and showed students that there is still much work to be done in research.

## Student Enthusiasm

From 14 schools across the south of England, the attending students showed excellent attitude and



commitment. They listened intently to the presentations, asking astute and helpful questions.

One commented *"Even at lunch the conversation turned to Physics, and this shows just how riveting and informative the day was"*.

## Teacher Networking

During the afternoon the teachers came together to share ideas about teaching physics in secondary education, and everyone agreed how important such opportunities were.

Two teacher email lists were identified as being useful forums:

**PTNC** - Physics Teachers News and Comments

**CAPT** - Connecting Advancing Physics Teachers. To join, visit

<http://networks.iop.org/archives/index.html>

Many commented that it's easier to get time out of school to take students to specific events - next year's events may well include a longer teacher training/networking slot.

The Institute of Physics is committed to facilitating physics networking across the country, and have a network of coordinators. Find contact details for your local coordinator at: <http://education.iop.org/Schools/teachnet/index.html>

## Next year

The plan for 2005 is to stage the event in three locations so we can extend the experience to more students. Keep watching CAPT and PTNC for news.