

South East Regional Newsletter

AUTUMN 2009

The National Picture

On 1 August 2009 the Further Mathematics Support Programme (FMSP) replaced the Further Mathematics Network (FMN). The FMSP continues the work of the FMN and extends it to provide professional development for teachers of Further Mathematics, promoting the benefits of studying Mathematics beyond GCSE and offering support for level 3 mathematics within diplomas. Like the FMN, the FMSP is managed by MEI and funded by the DCSF. The National Centre for Excellence in Teaching Mathematics (NCETM) is working in partnership with MEI to support the FMSP's work in teachers' professional development.

It is extremely pleasing that there continues to be an increase in the number of students studying mathematics post-16. Mathematics and Further Mathematics A levels have built upon last year's increased entry with further significant rises.

- AS level Mathematics numbers are up from 84613 to 103312, a 22% increase
- A level Mathematics numbers are up from 64593 to 72475, a 12% increase
- AS level Further Mathematics numbers are up from 8945 to 13164, a 47% increase
- A level Further Mathematics numbers are up from 9091 to 10473, a 15% increase.

Professional Development for teachers

The Further Mathematics Support Programme offers a range of professional development for mathematics teachers including:

- **Live, Online courses** are an exciting way of improving your subject knowledge.
- **Teaching Further Maths** is an extended course starting in July and running for 15 months. We will be taking applications for the next cohort from February 2010.

For information about PD please check the website www.furthermaths.org.uk/teacher_area. If you have any queries regarding the above please contact Sue de Pomerai. Your local FMSP Area Coordinator will also be arranging several PD events in your area this year.

News from the South East

Taking Maths Further 23 October 2009

This was the 4th annual 'Taking Maths Further' event at Aylesbury High School - aimed at encouraging Year 10 and 11 students to study mathematics beyond GCSE. Students and their teachers attended 3 x 80 minutes sessions in rota, including investigating complex numbers and the Mandelbrot Set using graphical calculators (James Toyer from Buckingham School and Nicki Studman from The Hazeley School, Milton Keynes) and catching criminals using Dijkstra's Algorithm (Julia Brown from Wycombe High School and Ashley England from Dr Challoner's Grammar School). The students really enjoyed the day: "I didn't know what to expect, but it was great".



More news from the South East

Introduction to Complex Numbers 21 September 2009

Students from 7 Oxfordshire schools got together to find out about complex numbers in an intensive but enjoyable afternoon. 47 students covered manipulation of complex numbers, solving quadratics and other polynomial equations, the Argand diagram and modulus/argument form; they completed a tricky jigsaw puzzle and played a relay race. Much of the material on complex numbers for FP1 (all exam boards) was covered.

Maths in Space 8 October 2009

The Hants & IoW "Maths in Space" event was attended by 170 post-16 mathematics students. The event, including a talk on black holes, a planetarium show, and a host of exhibitions from companies and organisation involved in enterprises associated with space (such as satellite manufactures) took place at INTECH, Winchester.

Oxbridge preparation afternoons

Two events were held, at Eton College and at Magdalen College School, Oxford. 26 students from Oxfordshire and Berkshire spent an afternoon solving problems, including an interview experience with feedback.

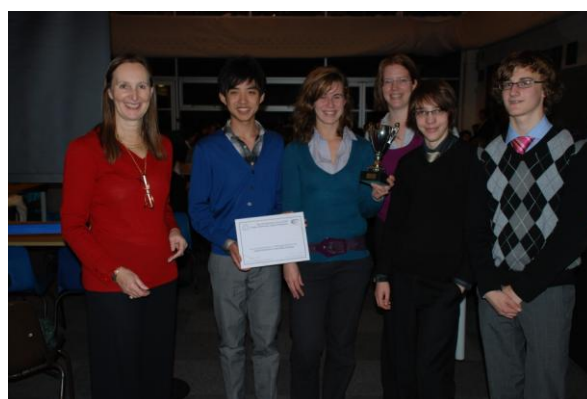
Senior Team Mathematics Challenge

The best thing about this event is hearing the teams who come near the bottom saying how much they have enjoyed it and wanting to come back next year! It is so exciting being in a room of 80+ teenagers absolutely engrossed in solving mathematical problems. Some of the heats in the south-east have been very closely fought, so congratulations to the winning teams, who go through to the final on 3rd February:

Abingdon School; Royal Latin School, Buckingham; Royal Grammar School, Guildford; Lord Wandsworth College, Hook; Reading School



Oxford heat winners: Abingdon School



Hampshire heat winners: Lord Wandsworth College, Hook



A team from Surrey puzzle over the relay round



Wendover heat winners: Royal Latin School, Buckingham

Events in the South East

Enrichment Events

Masterclasses at Oxford University

Friday 11th December **Numbers and Codes**

Places still available – email now to book them!

Tuesday 23rd March **Mathematical Biology**

Note the change of date

Friday 25th June **Complex Numbers and Fractals**

These sessions all take place at 2pm – 4.30pm and are aimed at year 11-13 students. They are free, but places need to be booked in advance. Light refreshments are provided. Contact Alexandra Hewitt for information:

alexandrahewitt@furthermaths.org.uk

Network Meeting for teachers of Key Stage 5 Mathematics

Thursday 3rd December 2009, 4.30pm – 6pm, University of Surrey

This is a chance for teachers to get together and share good KS5 practice (with locally made cakes). The content of these meetings will be driven by those attending and there will be plenty of opportunity to discuss ideas.

Contact Jenny Davey on jennydavey@furthermaths.org.uk or 07919 396134.

Berkshire Key Stage 5 Plus network meeting

Wednesday 9th December 3:45 to 5:15 pm, Little Heath School, Tilehurst, Reading At this meeting local staff will be demonstrating and sharing teaching resources. For details contact: jbyrne@westberks.org

Taking Maths Further

This enrichment day for year 11s will take place in Reading on Wednesday 3rd February. Contact Jeff Trim for information: jefftrim@furthermaths.org.uk

Maths Inspiration

An entertaining and inspiring event for post-16 mathematics students. Theatre Royal Winchester, 5 March 2010 from 1.00-3.45pm. Speakers include Claire Ellis, Chris Budd, Rob Eastaway and Hugh Hunt on “Maths, Weather and Climate Change”, “When Maths Meets Psychology” and “The Maths of Breakfast”. The event is also suitable for more able/motivated Year 11s. Booking details online at: <http://www.mathsinspiration.com/events.html>

Sixth Form Business Maths Challenge

Friday 5th March 2010 For teams of Sixth form students, solving problems set by local businesses.

Contact: jefftrim@furthermaths.org.uk

Enrichment Day for year 10s

Royal Holloway, Thursday 8th July. Contact Jenny Davey for information: jennydavey@furthermaths.org.uk

AS Puzzle Day

Thursday 1st July 2010 at Havant College. Contact Ruth Edwards: ruth.edwards@furthermaths.org.uk



More Events

Revision Days – January sitting

D1 (all boards)	Wednesday 9 th December	Reading	Contact: jefftrim@furthermaths.org.uk
S1 (MEI/AQA)	Friday 8 th January	Oxford	Contact: alexandrahewitt@furthermaths.org.uk
C1 (Edexcel)	Saturday 12 th December:	High Wycombe	Contact: JSealy@challoners.com
C3 (Edexcel)	Saturday 12 th December:	High Wycombe	Contact: JSealy@challoners.com
C3 (MEI)	Saturday 9 th January	Amersham	Contact: JSealy@challoners.com
C1 (all boards)	Saturday 9 th January am	Southampton	Contact: ruth.edwards@furthermaths.org.uk
C3 (all boards)	Saturday 9 th January pm	Southampton	Contact: ruth.edwards@furthermaths.org.uk

Revision Days – Summer sitting

Saturday 27th March 2010: AS Applications Revision Day

Revision for M1, S1 and D1 at TVU, Reading Campus. Contact: jefftrim@furthermaths.org.uk

Wednesday 28th April 2010: A2 Applications Day

Revision for M2, S2 and D2 at the University of Reading. Contact: jefftrim@furthermaths.org.uk

Wednesday 5th May: Further Pure Maths Revision

Revision for FP1 and FP2 at the University of Reading. Contact: jefftrim@furthermaths.org.uk

Details of further revision sessions will be included in the next newsletter.

CPD

Introduction to S1	Friday 15 th January	Reading	Contact: jefftrim@furthermaths.org.uk
Introduction to M1	Friday 14 th May	Reading	Contact: jefftrim@furthermaths.org.uk

Teach Statistics - Increase your confidence interval! A series of twilight CPD sessions addressing content from A level Statistics and pedagogy and coursework for GCSE Statistics

King Alfred's School, Wantage, 4pm – 6pm; Wednesday 13th January, Thursday 28th January, Wednesday 10th February, Thursday 4th March, Wednesday 17th March

Please book your places for these events as soon as possible as they are likely to be very popular.

National Higher Education STEM Programme

The University of Southampton, an FMSP Associate Institution, is one of six “spokes” in the National Higher Education STEM (science, technology, engineering and mathematics) Programme. This programme is designed to take forward activities in three related strands, one of which is activities to widen participation within and across the STEM disciplines at HE level through working with schools. This fits well with the aims of the FMSP to promote the studying of Further Mathematics. More details of the National Higher Education STEM Programme are at:

<http://www.stemprogramme.com>

Contact us...

Bracknell Forest, Reading, Slough, West Berkshire, Windsor and Maidenhead, Wokingham, Brighton and Hove, East Sussex, West Sussex:

Jeff Trim: 0118 9439 522 jefftrim@furthermaths.org.uk

Buckinghamshire, Hampshire, Isle of Wight, Milton Keynes, Oxfordshire, Portsmouth, Southampton:

Alexandra Hewitt: 07962 871828 alexandrahewitt@furthermaths.org.uk

Kent, Medway, Surrey:

Jenny Davey: 020 8547 8676/07919 396134 jennydavey@furthermaths.org.uk