

Spring 2014

West Midlands
Regional

NEWSLETTER

The National Picture

The Department for Education is to provide Mathematics in Education and Industry with substantially enhanced funding for a further three years to continue and extend the work of the Further Mathematics Support Programme, working with the National Centre for Excellence in Teaching Mathematics and the Institute of Education.

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Maths & Beyond

The FMSP will expand its work to improve access to Further Mathematics tuition, and to increase the numbers of students in England studying advanced mathematics post-16. The FMSP will continue to have a strong emphasis on teachers' professional development, to help meet the increasing demand from students to study Mathematics beyond GCSE level.

UKMT/FMSP Senior Team Mathematics Challenge Final

On February 4th at the Camden Centre, London, 59 teams competed in the 2013/14 STMC Final. The teams were all winners from the 55 regional heats involving 1146 schools and colleges.

The overall champions were the team from Hampton School. Alton College were in second place with Rainham Mark Grammar School taking third. The poster competition, on the theme of *Ruled Surfaces*, was won by The Grammar School at Leeds. The competition was again sponsored by Rolls-Royce plc. Dr Peter Neumann presented the prizes and congratulated all the participants on their achievements.

FMSP Wales

FMSP Wales has secured continued funding for the project from the Welsh Government for 2014-15 and 2015-16. For further information see the FMSP news announcement at:

Extended professional development courses

The FMSP provides a range of professional development courses, such as for STEP/AEA and for Key Stage 4. It also has an extensive programme of online professional development.

For more details on the FMSP CPD provision, please see:
www.furthermaths.org.uk/teacher_area/cpd.php

There are also extended courses that are taking applications:

Teaching Further Mathematics enables participants to study the content of Further Mathematics from a teaching and learning perspective. The course starts in July and applications are now being taken. For more information and an application form please see:
www.furthermaths.org.uk/teacher_area/tfm.php

Teaching Advanced Mathematics is designed to give teachers the skills and confidence to teach A level Mathematics effectively, focusing on subject knowledge and pedagogy. The Masters-accredited course fees are £600 but *schools and colleges of participants are entitled to receive £1200 in March 2015*, in recognition of the support they provide to enable one of their teachers to take the course. For more information please see:
www.mei.org.uk/tam

Regional Events and Updates

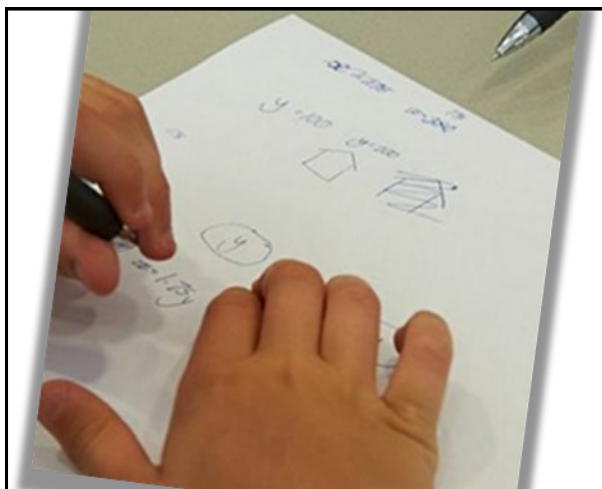
Professional Development

KS4 Enrichment & Extension

The Further Mathematics Support Programme has funding to develop resources and provide professional development to support teachers in stretching and challenging Key Stage 4 students working towards the Higher Tier Mathematics GCSE (or equivalent).

This course aims to:

- Familiarise teachers with a range of new FMSP, MEI and other resources designed to extend and enrich the mathematical experiences of Higher Tier GCSE students;
- Enable teachers to develop strategies to address the challenges of working with all Higher Tier GCSE students;
- Provide teachers with an opportunity to integrate these materials within their departments and schemes of work.



The course involves two separate face-to-face professional development days with some online support between the two sessions.

Courses are running in Birmingham, Keele, Warwick and Wolverhampton with the first day running in the Autumn term and the second running during the Spring term.

Although these courses have already begun we expect similar courses to run next year, so if you are interested please keep an eye on the website for details.

Teaching AS Core Maths

In November we ran a CPD event for teachers new to teaching AS Core Maths. The day covered topics common to all syllabi, such as the trigonometry, calculus, algebra, functions and sequences and series topics. We also looked at the structure and wording of exam questions and considered strategies to help students bridge the gap from GCSE.

The day was very popular and we received excellent feedback.

Year 12 Problem Solving

The FMSP runs a programme of CPD events aimed at developing sixth formers' problem solving skills with a focus on helping students prepare for Sixth Term Examination Paper (STEP), Advanced Extension Award (AEA) and Mathematics Admission Test (MAT) examinations.

In January we ran a course focusing on ways to introduce year 12 students to deeper mathematical problem-solving skills. The course included looking at resources that can be used with all students alongside the regular curriculum.

Those who attended the course said the resources were "excellent" and enjoyed "the chance to work through problems" and "develop mathematical thinking".



Enrichment for Students

Competitions

Year 10 Team Mathematics Competition

The Further Mathematics Support Programme has once again organised the Year 10 Team Competition, which is free to schools/colleges registered with the FMSP.



There are eight heats planned across the West Midlands in total. Four heats have already taken place in February and another four are planned for March. A regional final will be held in the Great Hall at the University of Birmingham on the 9th April 2014. The table below gives details of the heats:

Location	Date	Start Time
University of Wolverhampton, City Campus	Tuesday 4th February	2pm
The Sixth Form College, Solihull	Wednesday 5th February	4.30pm
University of Birmingham	Friday 7th February	9.30am
Bilton School, Rugby	Friday 14th February	9.30am
Worcester University	Wednesday 5th March	2.30pm
Keele University, Keele Hall Ballroom	Tuesday 11th March	10.30am
Myton School, Warwick	Wednesday 12th March	9.30am
Telford Conference Centre, University of Wolverhampton	Wednesday 12th March	10am

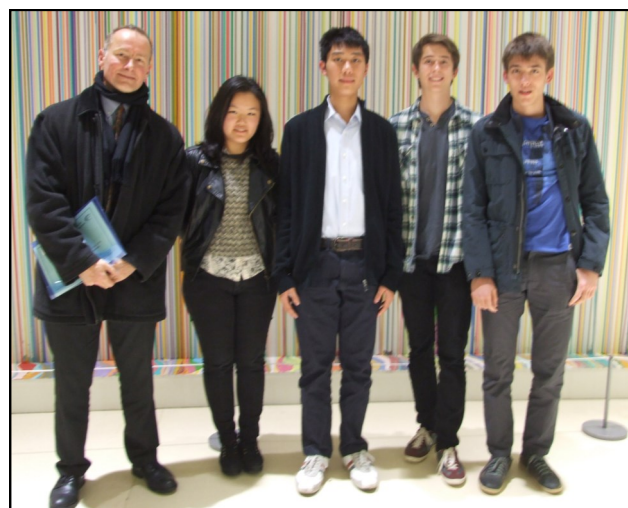
UKMT/FMSP Senior Team Mathematics Challenge

As highlighted in the National update on the opening page, the final of the 2013/14 Senior Team Mathematics Challenge took place on the 4th February in London. The schools taking part included six schools from the West Midlands, who had been the winners of the regional heats that took place in November 2013.

The winners included Queen Mary's Grammar School from Walsall, Shrewsbury School, Wolverhampton Girls High School and Oundle School. (Nr Peterborough).



Above: Queen Mary's Grammar School, winners of the Wolverhampton heat



Above: Oundle School, winners of the Warwick heat

Enrichment for Students

Future Events

Maths & Beyond

University of Warwick 19th & 20th March 2014

“Maths and Beyond” is a day event held annually at the University of Warwick.

This exciting day is aimed at Years 10 & 11 to encourage those students who enjoy maths to take it on to the next stage.



This year the keynote speaker will be ‘bestselling author and radio broadcaster’ Rob Eastaway and he will be discussing the Maths of TV Gameshows

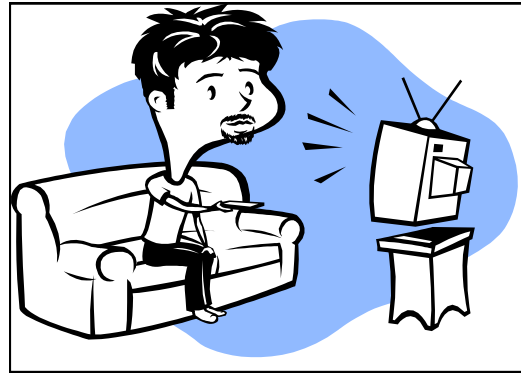
Prior to Rob’s talk there will be some active workshops provided by Sharon Tripconey, Ria Symonds, Deirdre Hollingsworth Richard Lissaman, Nick Barker and Phil Chaffe

For more information please visit the West Midlands regional pages of the FMSP website or contact Sue Bridge

Email: s.bridge@warwick.ac.uk Tel:02476528326

Maths of TV Gameshows

A talk by Rob Eastaway



TV game shows are big business - indeed the success or failure of many TV companies depends on them. But behind the showbiz glitz there is probability at work. In this interactive talk, Rob Eastaway analyses the maths behind some of the leading gameshows, looking at the tactics behind winning and the secrets of devising a good TV game. Find out the best tactics for everything from Deal or No Deal to The Million Pound Drop. There will even be a chance to play a version of The Weakest Link.



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West Midlands Events pages:

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For students:
[www.furthermaths.org.uk/?section=regions
&page=WM_enrichment](http://www.furthermaths.org.uk/?section=regions&page=WM_enrichment)

Future events include:

Year 10 Team Maths Competition Regional Final - 9th April, Birmingham University

Further Pure CPD Day - 2nd July, Birmingham University

Girls into Maths Can Go - 7th July, Birmingham University