

Yorkshire and The Humber Regional Newsletter

SPRING 2013

The National Picture

Throughout the current academic year the FMSP have been active in many areas of work – from tuition, to CPD, to enrichment, to engaging with universities. All this work seeks to enthuse about mathematics and to help support and suggest study of further mathematics.

This newsletter details some national developments before going on to describe activities and opportunities in your region.

UKMT/FMSP Senior Team Mathematics Challenge Final:

On February 5th at the Camden Centre, London, 62 teams competed in the 2012/13 STMC Final. The teams had qualified from 56 regional heats involving over 1100 schools and colleges.

The overall champions were the team from Westminster School (pictured below), who have won the competition on 2 previous occasions. City of London School, Eton College and Magdalen College School, Oxford, were in joint second place. The poster competition, on the theme of *Sets and Logic*, was won by The Grammar School at Leeds (pictured below). This year the competition was sponsored by Rolls-Royce plc. Sarah Malik from Rolls-Royce attended the final and presented the prizes.



Westminster School

The Grammar School at Leeds

More FREE resources now available – AQA Level 2 Certificate in Further Mathematics

The FMSP provides free teacher access to comprehensive online resources for AS/A level Further Mathematics via the Integral virtual learning environment – <http://integralmaths.org>. Access also includes materials for OCR Additional Mathematics, STEP, AEA, IMPS (Integrating Mathematical Problem Solving) and AQA Level 2 Certificate in Further Mathematics. We are pleased to announce that, via sponsorship from AQA, subscription to online resources for AQA Level 2 Certificate in Further Mathematics is free for centres, and their students, for the calendar year 2013. Please see the recent news announcement about this: www.furthermaths.org.uk/fm_news.php

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 see: www.furthermaths.org.uk/teacher_area/cpd.php. There are also extended courses that are now 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, focussing on subject knowledge and pedagogy. The Masters-credited course fees are £600 but **schools and colleges of participants are entitled to receive £1200 in March 2014**, 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

Yorkshire and The Humber Events and Updates

This and next term see many exciting happenings in the region, which you should consider getting involved in.

CPD

Date	Event	Venue
6 th March	KS4 Enrichment & Extension Day 2	The Shay, Halifax
12 th March	Teaching Further Pure for A2	The Shay, Halifax
12 th March	GCSE Problem Solving	University of Hull
16 th April	KS4 Enrichment & Extension Day 2	University of Hull
26 th April	Decision Mathematics 1	University of Sheffield
1 st May	KS4 Enrichment & Extension Day 2	University of Leeds
12 th June	KS4 Enrichment & Extension Day 2	University of Sheffield
13 th June	Teaching AS Core Day 1	Leeds Trinity University

Enrichment

Date	Event	Venue
5 th March	Year 10 Team Competition	All Saints Catholic School, Sheffield
7 th March	Year 10 Team Competition	Wyke College, Hull
8 th March	Year 10 Team Competition	Bootham School, York
11 th March	Year 10 Team Competition	Halifax High School
13 th March	KS4 Enrichment talk	University of Hull
13 th March	Year 10 team Competition	Lawnswood High School, Leeds
19 th March	Taking Maths Further	University of Leeds
22 nd April	Year 10 Team Competition Final	National Railway Museum
22 nd May	Celebration Evening	University of Leeds
27 th June	Year 10 Enrichment day	University of Sheffield
2 nd July	Mechanics Problem Solving	University of Leeds
5 th July	Taking Maths Further	University of York
July (date tbc)	Year 8 Fun Maths + workshop	University of Hull
10 th July	Taking Maths Further	University of Huddersfield

KS5 Network

Date	Event	Venue
27 th March	Changes in examinations.	Belle Vue Girl's School
24 th April	Engaging Students with Statistics	The Crossley Heath School
17 th June	Assessment / changes in examinations	Archbishop Sentamu Academy

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

For further information, please contact:

Jane West Bradford, Calderdale, Kirklees Area Coordinator

Sheila Eastwood, Leeds Wakefield Area Coordinator

Jean Smith, YH1 Coordinator

Dennis Almeida, YH4 Coordinator

Email: janeWest@furthermaths.org.uk

Email: sheilaeastwood@furthermaths.org.uk

Email: jeansmith@furthermaths.org.uk

Email: dennisalmeida@furthermaths.org.uk

Previous Events

STEP Support

In Leeds there are weekly classes for Step Support. These are run by Dr Lionel Elliott and they started in October and go through until the exam.

There are also monthly meetings at York University for student support with STEP run by Niall Mackay and Jamie Wood.

There is an on-going 12 week STEP preparation course at Sheffield University, initiated and managed by the FMSP coordinator: <http://bit.ly/ZaCEWK>

Continuing Professional Development

A2 Core Mathematics

On 9th October we held our day 2 of the A2 Core Mathematics course for teachers who are teaching A2 Core for the first time at the National Science Learning Centre.

Some of the topics covered were Differential equations, Integration and Vectors.

Seventeen teachers attended and some comments on the most useful aspects of the day were:

The types of activities we would use to get students talking.

Use of Autograph for Vectors.

Ideas of how to introduce topics.

Different style practical activities.

KS4 Enrichment and Extension CPD

This is a new venture for the FMSP. Teachers have the chance to try out a range of new materials targeted specifically at Higher Tier GCSE students over a two day course.

The resources aim to provide students and teachers with activities designed to consolidate understanding of some of the more demanding topics. Challenging tasks promote a deeper understanding of them and also encourage students to recognise the links between and within topics. Teachers are also encouraged to consider some additional sources of materials and to reflect on aspects of the underlying pedagogy.

Between the two days, teachers used some of the resources in their classrooms and the second day then provides an opportunity to consider how successful this was, how it can be developed further and how to share practice across the department and embed the resources in schemes of work.

In our region we are holding these events in York, Halifax, Leeds, Hull and Sheffield.



Using Geogebra in the Teaching of A level Mathematics

Eight teachers attended the 'Using Geogebra in the Teaching of A level Mathematics' course which took place at The National STEM Centre, University of York on 18th October 2012. Teachers had the opportunity to develop their skills in using Geogebra, whilst exploring examples of the effective use of Geogebra in the teaching and learning of a range of mathematics topics from AS Core Mathematics, Mechanics and Statistics.

Teaching Mechanics 2

Fourteen teachers attended the Mechanics 2 CPD on 1st February 2013 at The National STEM Centre, University of York. Each topic covered included short and long practicals to enhance the teaching of the topic.



Enrichment

Senior Team Mathematics Challenge

The **Leeds** event was held in The Great Hall at the University of Leeds on Wednesday 14th November. Twenty four teams attended and the three best teams were:

1. The Grammar School at Leeds
2. Tadcaster Grammar School
3. Ilkley Grammar School

The **York** event was held at Fulford School in York on Wednesday 14th November.

Twenty one teams attended and the three best teams were:

1. Queen Margaret's School
2. St Peter's School
3. Queen Ethelburga's School

The **Hull** event was held at Newland School, Hull on Thursday 15th November.

Ten teams attended and the best three teams were:

1. Beverley Grammar School
2. South Hunsley School
3. South Holderness Technology College



Schools newsletter

Mathematics enrichment for both teachers and students in YH4 is available via a termly newsletter managed and edited by the FMSP coordinator at the University of Sheffield. The current newsletter is available here: <http://bit.ly/Z7VUIJ>

Taking Maths Further!

This KS4 event took place on Wednesday 24th October 2012 at The Lawns Conference Centre, University of Hull. Pupils attended workshops including 'The Mathematics of Music'; 'Keeping Secrets'; Fun Maths; 'Topology and The Mobius Strip' with a final lecture by Colin Wright about Juggling: Theory and Practice. One hundred and five students from eight schools attended the event.



Key Stage 5 Network Groups

The **Bradford** group met for the first time on Wednesday 16th January at Belle Vue Girls' School. We shared resources to be used in the teaching of AS Core Mathematics.

The first meeting of the **Calderdale** group was held at Trinity Academy on Wednesday 23rd January and we shared resources and ideas for teaching A2 Integration.

The **Hull and East Riding** group met at Beverley Grammar on 4th February 2012 and discussed changes in the A level exams. We also shared resources for Decision Maths.

The **Sheffield and Rotherham** network met on December 5th at Brinsworth School. At this event David Burghes of CIMT talked about developments in the GCSE and A level mathematics curriculum. David Burghes is to address the **Doncaster** Heads of Maths meeting on March 13th on ways to motivate pupils in the classroom.

AS and A level revision sessions

A series of summer revision half days has been organised by the FMSP coordinator at Sheffield University: <http://bit.ly/XIOFzQ>

