

# Live Online Professional Development in Mathematics

*A range of courses to enable teachers to teach A level Mathematics and A level Further Mathematics with confidence.*

A modern approach to professional development; rather than attending a one or two day course, delegates meet weekly for live, interactive online sessions with a tutor and a small group of teachers.

These courses focus on developing subject knowledge and discussing approaches to teaching.

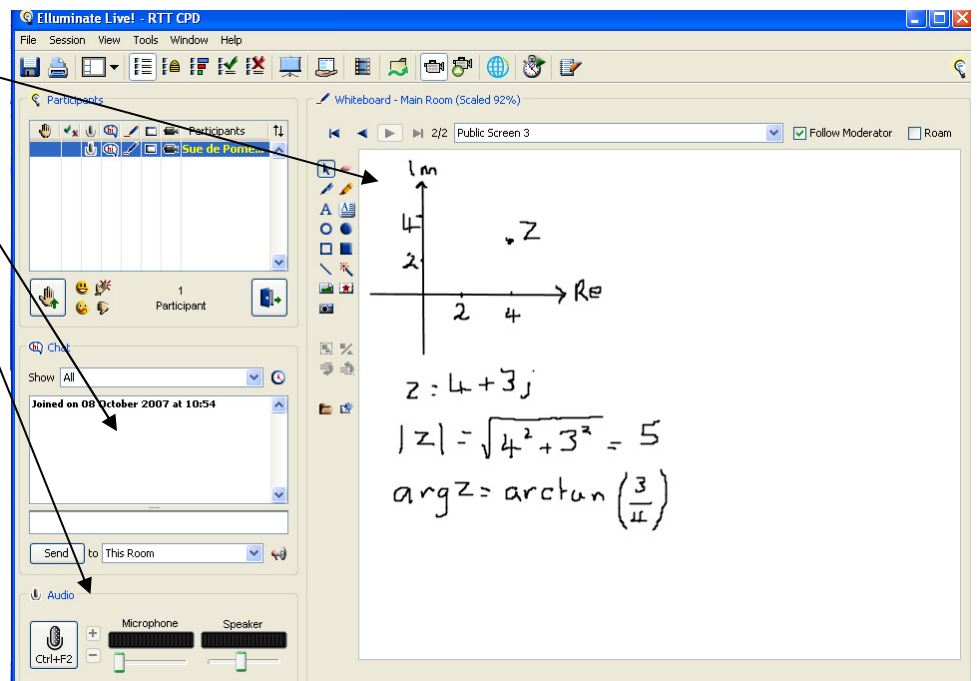
## How does the live online tutoring work?

We use a web-based facility which is easy to use and allows a tutor and delegates to communicate live online using audio, handwriting on a shared virtual whiteboard and instant messaging via the internet.

- Shared whiteboard
- Instant messaging
- Audio conferencing
- Application sharing



Headsets are readily available to purchase on the high street or from online retailers for about £5



## What you need to participate

- A broadband internet connection
- A recent version of Java (free to download)
- A headset for communication

## Autumn 2011

### Using TI-Nspire to enhance teaching & learning in A level Mathematics

**Cost £85**

Deadline for applications: **Friday 25<sup>th</sup> November 2011**

#### Course Content:

The course will focus on integrating the use of TI-Nspire into the teaching and learning of mathematics at A level:

- Teaching suggestions for AS Core, A2 Core and statistics.
- Ideas for both teacher-centred and student-centred ICT.
- A range of activities will be covered using a variety of TI-Nspire applications\*.
- There will be an opportunity to focus on specific aspects of content at delegates' request in later sessions.

**Course Tutor:** Tom Button

DATE	TIME	TOPIC	PEDAGOGY	TECHNIQUES
Wed 30 <sup>th</sup> November	16.30 – 17.00	Introduction to the online classroom	<i>This is an opportunity for teachers to familiarise themselves with the online classroom and check their connection</i>	
Wed 7 <sup>th</sup> December	16.30 – 17.30	AS Core: coordinate geometry, algebra	Classroom display tools	Dynamic graphing including sliders, variables
Wed 14 <sup>th</sup> December	16.30 – 17.30	AS Core: differentiation/integration, sequences/series	Student-centred tasks	Using Lists & Spreadsheets, linked applications, Nspiring learning resources
Wed 11 <sup>th</sup> January	16.30 – 17.30	Statistics	Using real data, selecting diagrams	Using Data & Statistics, Importing data
Wed 18 <sup>th</sup> January	16.30 – 17.30	A2 Core: logarithms, exponentials, trigonometry	IWB use, Effective questioning	Smartview, Using Navigator
Wed 25 <sup>th</sup> January	16.30 – 17.30	A2 Core: further differentiation/integration, vectors	Advanced Nspire tools	Advanced Graphing tools, Using CAS

\*The applications will be shared in the online classroom during the sessions. Delegates who do not currently have a copy of TI-Nspire can download a trial version from <http://education.ti.com/calculators/downloads/UK/>

**Further information and an application form:**

[http://www.furthermaths.org.uk/teacher\\_area/rpd.php](http://www.furthermaths.org.uk/teacher_area/rpd.php)

**Enquiries: [LOPD@furthermaths.org.uk](mailto:LOPD@furthermaths.org.uk)**

The Further Mathematics Support Programme is managed by

