



# Teaching Mechanics in the 2017 A Level classroom - Kinematics

## Chippenham

15th January 2020

### Overview

A comprehensive look at modelling and developing Mechanics teaching for the 2017 Mathematics A Level course; offered as four bite sized courses.

Each course will look at how to model situations, give some practical approaches to teaching and develop concepts in Mechanics for A Level Mathematics.

Teachers can attend individual courses or can attend the whole series.

### Aims

- To provide teachers with an opportunity to develop key Mechanics concepts
- To enable teachers to see how practical ideas and modelling can be used in the introduction and teaching of Mechanics
- To give teachers the opportunity to use resources and work on problems in Mechanics

### Who will benefit from attending?

This is a set of Mechanics courses which are ideal for all teachers who will be teaching the A Level Mathematics course. They are particularly suitable for teachers who are new to teaching Mechanics, or who would like some fresh ideas on the introduction and development of topics.

## Content

Kinematics, 15 January:

- Motion in 1 and 2 dimensions
- Kinematics graphs
- Constant and variable acceleration

Forces, 29 January:

- Identification and representation of forces
- Application of vectors to forces

Newton's laws and connected particles, 5 February:

- Applying Newton's laws to a particle
- Developing Newton's laws to connected particles

Projectiles and moments, 27 February:

- Motion under gravity in two dimensions
- Rigid bodies in equilibrium

## Other Information

Teachers are welcome to attend all courses, but may alternatively choose to attend those courses most appropriate. For example; just the "Projectiles and moments" course or alternatively any combination of two or three courses

## Study Schedule

Timetable for each course: (there will be flexibility in the timings during the course)

15:15 Registration and refreshments

15:30 Modelling and practical approaches

16:30 Refreshments

16:45 Resources, ideas, discussion

17:45 Plenary and feedback

## Key Facts

<b>Event ref:</b>	#6627
<b>Audience:</b>	Teachers
<b>Curriculum focus:</b>	A level Mathematics
<b>Mathematical focus:</b>	Mechanics
<b>Event format:</b>	Face-to-face Professional Development
<b>Event length:</b>	2.5 hours
<b>Region:</b>	South West
<b>Venue:</b>	Hardenhuish School, Chippenham, Wiltshire, SN14 6RJ
<b>Date:</b>	Wed 15th Jan 2020
<b>Course times:</b>	15:15 - 18:00
<b>Fee:</b>	Free for teachers in state funded schools

## Registration

For more information, or to register for this event, please visit <https://amsp.org.uk/events/details/6627>