

MATHEMATICS ENRICHMENT, 2018–2019 INTERMEDIATE GROUP: TY-s, year students.

Note: 3rd year students who have attended 1 year of Junior Maths Enrichment are welcome to join the 4th and 5th year Group.

Some changes in topics/lecturers may occur from week to week.

SATURDAYS, 10:00–13:00, WESTERN GATEWAY BUILDING room G01

Date	Lectures: Click on titles to download resources		Exercises: Click on titles to download resources	
	Topic	Staff	Topic	Tutors
12-16 Nov	IrMO Round 1 - Students selected by schools based on the Round 1 results are invited to join the programme.			
24 th Nov	Pigeonhole Principle	Arundhathi Krishnan	Pigeonhole Principle	Des, Chris
1 st Dec	Number theory	David Goulding	Number theory	David, Dylan
8 th Dec	Modular Arithmetic	Anca Mustata	Modular Arithmetic	Ciaran, Paolo
16 th Dec – 5 th Jan	No class		No class	
12 th Jan	Combinatorics	Arundhathi Krishnan	Mastermind	Paolo, Declan
19 th Jan	Combinatorics	Anca Mustata	In-Class Review and Combinatorics1	Chris, Des
26 th Jan	Induction I /Induction II	Cónall Kelly	Induction and Sums	Ciaran, David
2 nd Feb	Algebra	Philipp Hoevel	Algebra	Paolo, Reggie
9 th Feb	Geometry	Anca Mustata	Geometry	Des, Alison
16 th Feb	EGMO selection	10:00-13:00	2018 Solutions	
23 rd Feb	No class	No class		
2 nd March	Number Theory	Tom Carroll	Number Theory	Chris, Dylan
9 th March	Number Theory Statistics	Jacob Bennett Woolf Michael Cronin(TBC)	Number Theory Statistics	Michael Cronin
16 th March	Geometry lectures and properties I, II and III	Anca Mustata	Angle Chasing	Des, Alison
23 rd March	Quadratics	David Henry (TBC)	Quadratics and Inequalities	David, Paolo
30 th March	AM-GM-HM Inequalities	Claus Koestler (TBC)	Inequalities2	Des, Chris
6th April	Purple Comet international team competition			
13 th April	Modular Arithmetic	Andrei Mustata	Modular Arithmetic	Ciaran, Paolo
20 th Feb	No class	No class		
27 th April	Geometry	Anca Mustata	Geometry of parallels Cyclic Geometry	Declan, Des
4 th May	Polynomials	Ben McKay (TBC)	Polynomials 2, Polynomials 1	Paolo, David
11th May	IrMO	10:00-13:00	IrMO	14:00-17:00
Saturday, 25 th May	Aula Maxima	Awards	IrMO Award Ceremony	

The top 4 female students in the **EGMO** selection will be invited to participate in the

European Girls Mathematical Olympiad on 7-13 April in Kyiv, Ukraine.

The top 6 students at the Irish Mathematical Olympiad will be invited to participate in the 60th International Mathematical Olympiad which will take place in **Bath, UK** during **14-22 July, 2019**.

A larger group of students making the IrMO roll of honour will become part of the **Irish Olympiad squad** and will be able to take part in training camps and special remote training sessions in preparation for the **IMO in 2019**.