

Press Release

UK earns two Gold Medals and 6th place at the International Mathematical Olympiad 2024

The UK team excelled at the 65th International Mathematical Olympiad (IMO), held in Bath, UK, placing **joint sixth** out of 108 participating countries. This is the UK's strongest performance since 1995 at this "world championship of mathematics".

The UK team was made up of six secondary school pupils, who earned **two gold medals**, three silver medals, and one bronze medal. Out of 609 total participating students, the UK team achieved the following individual awards:

Alex Chui	Total score 35/42
Sam Griffiths	Total score 28/42
Isaac King	Total score 25/42
Mikaeel Shah	Total score 19/42
Samuel Sturge	Total score 31/42
Haolin Zhao	Total score 24/42

Gold Medal, 5th out of 609 Silver Medal Bronze Medal **Gold Medal, 19th out of 609** Silver Medal

The only teams with a better score than UK were the mathematical powerhouses of USA, China, Korea, India and Belarus. The last time USA placed 1st at the IMO was in 2019. The UK was comfortably top amongst Western European nations, followed by Italy (14th place) and France (21st).



The UK Team receiving their medals at the IMO 2024 Closing Ceremony.



Alex Chui from Tonbridge School is now into the Top Ten on the all-time IMO Hall of Fame across all countries, having earned three gold medals and two silver medals in his five participations so far. Alex has the chance to attend two further IMOs, and if he wins two additional gold medals, will leave school with the strongest record of any participant in the prestigious competition's 65 year history.

The UK IMO Team Leader was Dr Dominic Yeo, a mathematician at King's College London, and the Deputy Team Leader was Dr Vesna Kadelburg of the Perse School, Cambridge

Alex Chui, three-time gold medallist, said:

"I really enjoyed this year's IMO and the preparation together with my teammates and the opportunity to meet contestants from all over the world. I am glad to have got one more gold medal! My favourite question in the contest was the controversial Problem 5 about Turbo the Snail!"



Alex Chui with his gold medal from the IMO 2024.



Dominic Yeo, the UK Team Leader said:

"These problems would be found challenging by any mathematician of any age, and we're very proud of the UK team, and especially of Alex and Samuel, for the creativity and breadth of their solutions. The UK's school curriculum is less directed towards this kind of problem-solving than in many other countries, and so the team members have had to work particularly hard to prepare for IMO 2024. This excellent set of results is richly deserved. We hope that the skills they've learned, and the confidence gained from this super performance at IMO 2024 will set them up well for future progress in mathematics and beyond!"

The British team was selected and trained by the UK Maths Trust, the charity which organizes maths competitions in UK schools, with the generous support of the company Jane Street.

For further information please contact:

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More about the IMO:

The UK team was organised by UKMT. Information about selection and training for the IMO can be found at <u>bmos.ukmt.org.uk</u>

The six students representing the UK team were:

Alex Chui - Year 11, Tonbridge School Sam Griffiths - Year 11, Kingswinford Academy Isaac King - Year 13, Tonbridge School Mikaeel Shah - Year 13, Isleworth and Syon School for Boys Samuel Sturge - Year 13, Kingston Grammar School Haolin Zhao - Year 13, St Paul's School

IMO 2024, the 65th IMO, took place from 14th - 22nd July 2024, and was hosted in Bath, UK, having been originally scheduled for Kyiv, Ukraine.





The UK Team celebrating their results and medals from the IMO 2024.

The competition consisted of two papers on 16th and 17th July, each with three problems of increasing difficulty, targeting the strongest school-aged mathematicians in the world.

The IMO is the world championship of mathematics for students in secondary education. It is a problem-solving contest for high school students, held in a different country in July every year. The first IMO was held in Romania in 1959, with seven countries taking part. Today, more than 100 countries participate, representing over 90% of the world's population. The IMO is the oldest, biggest, and most prestigious of all the international science Olympiads and the problems of the IMO are notoriously difficult. Many IMO participants go on to successful careers in mathematics, including winners of the Fields Medal (the "Nobel Prize for mathematics") such as Terence Tao, Maryam Mirzakhani, and the UK's Sir Timothy Gowers. More details can be found at <u>imo-official.org</u>.

Full results can be found at <u>https://www.imo-official.org/results.aspx</u>

The problems from this year's IMO can be found at <u>https://www.imo-official.org/problems.aspx</u>

The problems of IMO 2024 may be too technical for a wide readership, and some media outlets may find the typesetting a challenge. The following problem is a good example of a recent maths olympiad problem which will be accessible to a far wider group of readers, and is easy to typeset. This was Problem 5 of the British Mathematical Olympiad in 2023/24 and permission is given for this to be reprinted:



An artist arranges 1000 dots evenly around a circle, with each dot being either red or blue. A critic looks at the artwork and counts faults: each time two red dots are adjacent is one fault, and each time two blue dots are exactly two apart (that is, they have exactly one dot in between them) is another. What is the smallest number of faults the critic could find?

About UKMT

The UK Mathematics Trust is a registered charity whose aim is to advance the education of children and young people in mathematics. It organises national mathematics competitions and other mathematical enrichment activities for UK secondary school students. Further information about the Trust and its activities is available at <u>ukmt.org.uk</u>.