

## **Annual Report of Activities for the Liverpool Mathematical Society AGM**

### *Worshipful Company of Actuaries*

The Society benefitted from a generous grant of £2100 for the 2023-24 year, which was used to support Open Challenge and the lecture series.

### *Open Challenge 2024*

The theme was *Constellations*. The paper, solutions and results can be found on the Society's website. All entrants, together with teachers and parents, were invited to an online evening of mathematical recreation on the gather.town platform on 9th May. The event included a series of puzzles, presentation of the solutions and a virtual presentation of the prizes. Gordon Sharp, a representative of the Worshipful Company, spoke on their behalf. The competition attracted entries from a very wide area with some outstanding scripts from the top prize-winners. 22 prizes were awarded and 29 certificates. Entries were mostly from students in Years 12 and 13, but with a few received from students in younger age groups.

### *Pop Maths Quiz 2024*

The Pop Maths Quiz is a team competition that runs a bit like a pub quiz, but without any alcohol!

Teams consist of 4 students (under 19 years) who, during the Quiz, work as a team to attempt to solve a number of questions on a wide range of mathematical topics. They then have the opportunity to give their answers via an electronic response system. Not all questions require specific A-Level Maths knowledge but all questions have a mathematical flavour.

The 20th Annual LivMS Quiz was held on Saturday 2nd March 2024 at Liverpool John Moores University Student Life Building and also on Teams, and was organised by Barry Grantham, Ivo Siekmann, Ian Jarman, Sue Harkness and Tony Carter.

It was attended by 168 students in 43 teams from 17 schools and was supported by 19 teachers and 4 LivMS staff.

Online teams took part in Lancashire, Spain, and the Channel Islands. Cash prizes were awarded to those attending in person, and all participating teams received certificates. 13 teams achieved Gold standard, 15 achieved Silver and 6 achieved Bronze standard.

The Pop Maths Quiz was supported by Liverpool John Moores University and WHSmith Promotions Ltd.

## *Popular Lectures 2023-24*

Five public lectures were held. One was delivered over Zoom. Two were in-person. The Presidential Lecture and one other were offered in a hybrid format.

### Fantastic Numbers and Where to Find Them, Tony Padilla, 18/10/2023

Around 150 people attended this in-person lecture in the 502 Teaching Hub at the University of Liverpool, a mixture of local schools, undergraduates, and staff.

### The Maths of Micro-Swimmers, Rachel Bearon, 08/11/2023

This was the Presidential Lecture.

31 people attended in the Maths Building at the University of Liverpool, while there were a further 19 Zoom connections.

### Small Changes, Big Differences, Alison Kiddle, 13/12/2023

This was the Christmas Lecture. Students and teachers from a variety of schools attended, with an approximate audience of 130 people.

### Alicia Boole, The Fourth Dimension and the Beginnings of the Liverpool Mathematical Society, Moira Chas, 07/02/2024

Moira was speaking via Zoom from State University of New York at Stony Brook. Attendance was about 40, including at least two schools connecting with several students in their audience, with a variety of academic staff and the public also in remote attendance.

### Fantastical Modes and How to Find Them, Finn Allison, 06/03/2024

Finn is a PhD student and was our local speaker for this year.

The attendance of this hybrid lecture was about 30 people across in-person and Zoom.

## *Acknowledgements and Thanks*

The Committee of the Society would like to express its gratitude to all those who contributed to the success of the above events.