

# Maths Schools Governance Network Day 2021

30 April 2021, 11:00-15:00

Briefing and information pack

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# Introduction from Dan Abramson, Head Teacher

Thank you for joining us for the Maths Schools Governance Network Day 2021. King's College London Mathematics School (KCLMS) is delighted to host this collaborative event for governors of UK maths schools.

Governors from all three already open schools (KCLMS, Exeter and Liverpool) are very much looking forward to virtually meeting with representatives from sponsoring organisations in the process of opening a maths school.



## The purpose of the event is to:

- Further the governance network between the UK specialist maths schools
- For the maths schools to learn from and with each other
- To facilitate more one-to-one contacts between governors of maths schools

The event will feature several workshops focusing on key issues including admissions, curriculum, outreach, and alumni, as well as an opportunity to talk to students and alumni of KCLMS.

It is fantastic to see the creation of unique learning environments for A-level maths students who have a real passion for the subject. All of us share the same mission: to provide opportunities for bright young mathematicians and widen participation in mathematical degrees and careers at the very best institutions.

We should all feel a sense of great pride being part of this growing network of UK maths schools. We must do all we can to support one another especially the emerging schools and their respective governors in their journey to establish themselves.

I look forward to meeting you virtually and having stimulating discussions on further improving the impact and work of the UK maths schools' network.

# Schedule of the day

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## 1100-1130: Introduction and Welcome

- Fun maths problem starter introduced by **Dan Abramson, Head Teacher, King's Maths School (KCLMS)**. As participants join, there will be a brief, optional maths problem to solve.
- Why are we here and what are maths schools for? Our mission for change. **Alison Wolf CBE, founding Chair of Governors, KCLMS**.
- Welcome and quick introductions; outline of the day. **David Benello, Chair of the Governing Body, KCLMS**.

## 1130-1215: Workshop 1 (Outreach, Broader curriculum, Admissions & Marketing)

- **Outreach workshop with Exeter:** Kerry Burnham, Head Teacher, will present an overview of outreach at the school, how it has developed over time and lessons learnt along the way. Participants will hear from students about their experience of outreach and Kerry will share how the school aims to measure the impact of EMS programmes. The final part of the session will focus on collaborative projects between the maths schools with an opportunity for participants to share their ideas for future projects.
- **Broader Curriculum workshop with King's:** Emma Lawsen, Academic Literacy and EPQ Coordinator, will share information about the King's Certificate – a substantial, challenging, and collaborative research project undertaken by all students in Year 12 alongside the guidance of an academic or industry mentor.

The curriculum, intended learning outcomes, and vision for the projects will be explored in some depth, along with examples of student work. For the rest of the session, we will discuss avenues for the further evolution of our research programmes, as well as ways in which maths schools can work together to guide students towards impactful research.

- **Admissions and marketing workshop with Liverpool:** David Hemsley, Assistant Head Teacher, will cover the following:

**The challenge:** As a new school we had to communicate regionally that we were here and how we could help schools and students. We also had to establish links with schools, universities, and businesses. In this session, we will share our marketing plan and activities, how we developed staff's skills sets and built up our brand. We will also discuss our admissions process, including the use of the Admissions+ software. David will cover challenges, solutions and future plans.

## 1215-1245: Lunch break

- There will be no workshops during this period. Participants are welcome to catch up with work and personal tasks. Please keep yourself dialled into Zoom and regroup for 12.45 PM.

## 1245-1315: KCLMS student panel

- This will be a lively discussion between Head Teacher Dan Abramson and KCLMS students. They will discuss a range of topics including the benefits of attending a maths school, their favourite projects and any advice for emerging maths schools. Participants are welcome to submit questions during the workshop via the Zoom Chat function.

#### **1315-1400: Workshop 2 (Outreach, Broader Curriculum, Admissions & Marketing, Alumni)**

- **Outreach workshop with Exeter:** please see previous page for a summary of the session's aims.
- **Broader curriculum workshop with King's:** please see previous page for a summary of the session's aims.
- **Admissions and marketing workshop with Liverpool:** please see previous page for a summary of the session's aims.
- **Alumni workshop with King's:** Dan Abramson, Head Teacher, will present data on where our alumni are now, analysing both those cohorts at university and those who have progressed into early careers.

Aurelie Leonard (External Relations Officer) will share our thinking on alumni engagement before introducing participants to a panel of KCLMS alumni. The remainder of the session will be a discussion with questions from participants focusing on the panel's experiences as both students and alumni, and on learning how to engage your own school's alumni community.

#### **1400-1500: Networking session and alumna talk**

- This final workshop will include:
  - Mini group break-out session for networking and discussion
  - Key learnings and outcomes from the day
  - A brief feedback survey
  - Observations from a KCLMS alumna
  - Goodbyes and thank you – **Dan Abramson, KCLMS Head Teacher**

#### **Workshop speakers:**

- **Admissions/marketing** – David Hemsley, Assistant Head Teacher (University of Liverpool Mathematics School)
- **Outreach** – Kerry Burnham, Head Teacher (Exeter Mathematics School)
- **Broader curriculum** - Emma Lawsen, Academic Literacy and EPQ Coordinator, Lead Teacher of Wider Outcomes (King's Maths School)
- **Alumni** – Dan Abramson, Headteacher; Aurelie Leonard, External Relations; Alumni (King's Maths School)

# Housekeeping information

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## Useful contacts on the day:

Please email Aurelie Leonard in the run up to Friday 30 April with any queries. On Friday, please email both Aurelie and Laura with any technical issues or queries.

Aurelie Leonard (External Relations Officer) is the Human Facilitator for the event:  
[aurelie.leonard@kcl.ac.uk](mailto:aurelie.leonard@kcl.ac.uk)

Laura Nicholas (Data, Outreach and Exams Officer) is the Technological Facilitator for the event and will help with Zoom and other technical queries: [laura.nicholas@kcl.ac.uk](mailto:laura.nicholas@kcl.ac.uk)

## Important technical details:

- Please ensure you upgrade to the latest version of Zoom: <https://zoom.us/download>
- When dialling into Zoom and joining, please name yourself with your first and last name along with the university behind the school in parentheses e.g. Aurelie Leonard (King's). This will make it easier for us to identify you and put you in relevant groups.
- Please pre-register for the Zoom meeting in advance so we can assign you to the right workshops.

Individual schools ' background info and attendees



## Operating schools:

### Exeter Mathematics School

#### Attendees

- Trevor Bailey, Governor, Enhanced Curriculum
- Kerry Burnham, Head Teacher
- Nathan Harvey, Governor, Finance
- Philip Jenkinson, Vice Chair of Governors
- Jenny Leach, Governor; Assistant Principal, Exeter College
- Jennifer Long, Parent Governor/SEN
- Stephen Mariadas, Governor; Exeter College lecturer; CEO of South West Institute of Technology
- Anne Oxborough, Chair
- Tim Paulden, Link governor for Outreach & Industry
- Pete Vukusic, Chair of the Curriculum and Student Experience Committee

#### School bio

**Name of school:** Exeter Mathematics School

**Name of linked university:** University of Exeter

**Current/envisioned number of students in each year group:** 64 – current

#### **Mission/vision statement**

- Identify young people with the potential for exceptional success in mathematics and science.
- Raise aspirations among mathematically able young people.
- Enhance the supply of capable undergraduates in mathematics and closely related fields.
- Nurture students with the potential to become the mathematicians and scientists whose work underpins the innovation of tomorrow.
- Contribute to the on-going development of mathematics, physics, and computer science pedagogy.
- Provide a research platform which will influence mathematics teaching well beyond our walls.
- Form stronger links between Industry and Mathematics Education
- Have a positive impact on mathematics, physics and computer science education in Cornwall, Devon, Dorset, and Somerset.

#### **Three key achievements from the last 12 months**

- Secured better boarding bursaries
- Introduction on new enrichment courses in year 13 (curriculum x)
- Excellent provision during COVID disruption

#### **Three key challenges the school is currently facing**

- Boarding is too expensive and insecure – we need our own building
- We do not have enough space in the main school building to meet our needs
- COVID-19 has disrupted outreach, teaching, and recruitment activities

#### **Links to any user-generated-content**

Website: [Exeter Maths School | Home \(exetermathematicsschool.ac.uk\)](https://www.exetermathematicsschool.ac.uk)

Youtube: [Exeter Mathematics School - YouTube](#)

Facebook: [Exeter Mathematics School | Facebook](#)

Instagram: [Exeter Mathematics School \(@exetermathssch\)](#) • [Instagram photos and videos](#)

Twitter: [Exeter Maths School \(@ExeterMathsSc\) / Twitter](#)

### King's College London Maths School

## Attendees

- Dan Abramson, Head Teacher
- Anthea Ameer, Parent Governor
- David Benello, Chair of Governors
- Melissa Clarke, Governor
- Tom Collins, Deputy Head (Academic)
- Graham Keniston-Cooper, Chair of Investment Committee
- Emma Lawsen, Academic Literacy and EPQ Coordinator, Lead Teacher of Wider Outcomes
- Aurelie Leonard, External Relations
- Rachel O’Riordan, Parent Governor, Well-being
- Margaret Peacock, Governor, Chair of Education
- Alice Rogers, Governor, Chair of Outreach
- Kevin White, Governor, Buildings
- Robert Wilne, Outreach Programme and PD Lead
- Alison Wolf CBE, Founding Chair of Governors

## School bio

**Name of school:** King’s College London Mathematics School

**Name of linked university:** King’s College London

### **Current/envisioned number of students in each year group**

70 in each year group, with a vision to expand to 100 in each year group in a few years’ time.

### **Mission/vision statement**

King’s College London Mathematics School is for students with a particular aptitude and enthusiasm for mathematics, and aims to widen participation in mathematical degrees and careers at the very best universities and institutions.

### **Three key achievements from the last 12 months**

- Development of our electronic learning, teaching and operational infrastructure and skillset in response to the global pandemic.
- Introduction of a post-A Level year 13 optional programme encouraging positive and broad academic interests as well as wider life skills (Curriculum+).
- Improved openness, discussion, policies, and procedures concerning mental wellbeing.

### **Three key challenges the school is currently facing**

- Securing government funding for our planned building expansion.
- Pressure on our admissions system and mission to widen participation arising from our increasing popularity.
- Continuous need to adapt to the challenges presented by the global pandemic.

### **Links to any user-generated-content**

Website: [King’s Maths School](#)

Alumni site: [King’s Maths School Alumni Community](#)

Youtube: [Year 0 video: who are we?](#) | [Year 1 video: our building](#)

Instagram: [King’s Maths School \(@kingmathschool\)](#) • [Instagram photos and videos](#)

Twitter: [King’s Maths School \(@kingmathschool\)](#) / [Twitter](#)



## University of Liverpool Maths School

### Attendees

- Gavin Brown, Chair of Trustees
- Kerry Burnham, Trustee; Head Teacher of Exeter Maths School
- Damian Haigh, Head Teacher of Liverpool Maths School
- Dei Harris, Vice Chair
- David Hemsley, Assistant Head; Marketing
- Kurt Langfeld, trustee; also, a member of the opening board for the Mathematics Specialist School in Leeds
- in partnership with the University of Leeds.
- Martin McDonnell, Chair of the Education Committee
- Anthony Rooney, Trustee, Finance and Risk Committee
- Kathryn Ruane, Clerk to the board
- John Thompson, Trustee, SEN, Safeguarding, Education, Well Being
- Carsten Welsh, Head of the Physics Department, Liverpool University

### School bio

**Name of school:** University of Liverpool Maths School

**Name of linked university:** University of Liverpool

**Current/envisioned number of students in each year group:** 29 currently, in first year of existence. The PAN is 80 per year group, so we expect 160 on roll in about 5 years' time.

### **Mission/vision statement**

We exist to enable children with a strong interest and high potential in the mathematical sciences to achieve global impact through careers in the mathematical sciences. By preparing them thoroughly and comprehensively for STEM degrees and significant roles both within local communities and the global community of science, technology, engineering and mathematics, our students will be equipped to become tomorrow's industrial and academic researchers, innovators who will address the world's greatest challenges, teachers who will inspire the next generation, wealth creators, entrepreneurs, and problem solvers.

### **Three key achievements from the last 12 months**

- Opening a new maths school
- Recruiting an excellent staff team
- Coping with the COVID pandemic in the pre-opening and first year of the school!

### **Three key challenges the school is currently facing**

- Recruiting students (61 applications for cohort 2, but quality and commitment is mixed).
- Establishing systems and policies – from routine building management to finance and governance
- Developing the wider curriculum during COVID limitations

### **Links to any user-generated-content**

- Outreach: <https://liverpoolmathsschool.org/outreach-reaching-your-potential/>
- YouTube: <https://www.youtube.com/channel/UC0R4VJkNIqcWLD0UvH71KSQ>
- Instagram: <https://www.instagram.com/livmathsschool/>
- Facebook: <https://www.facebook.com/LiverpoolMathsSchool>

### **Name of key governance contact at the school:**

[Kathryn.ruane@liverpoolmathsschool.org](mailto:Kathryn.ruane@liverpoolmathsschool.org) – Clerk to Board of Trustees

[gmbrown@liverpool.ac.uk](mailto:gmbrown@liverpool.ac.uk) – Chair of Board of Trustees

### **Schools currently being developed**

## Cambridge Maths School

### Attendees

- Anne Constantine, Chair of the steering group for the Cambridge Maths School project
- Rhiannon Evans-Ali, Sixth form lead for admissions and university applications
- Clare Hargraves, Deputy Head, Chesterton; Curriculum and Project Lead, Cambridge Maths School, Eastern Learning Alliance (ELA)
- Ryan Kelsall, Deputy CEO, Eastern Learning Alliance (ELA) – Cambridge Maths School

### School bio

**Name of school:** Cambridge Maths School, part of the Eastern Learning Alliance

**Name of linked university:** University of Cambridge

**Current/envisaged number of students in each year group:** 100

### **Mission/vision statement**

The vision of Cambridge Mathematics School is:

- To foster opportunity
- To deliver excellence
- To cultivate future genius
- To increase social mobility
- To set alight Cambridge's brightest minds and especially those from the most disadvantaged backgrounds.

### **Three key achievements from the last 12 months**

- Gaining the active support of ARM, one of Cambridge's most prestigious tech companies, which is now a member of the steering group.
- We have agreed the A level offer with the DfE.
- CMS' sponsoring Academy Trust has merged with another local Trust to form the Eastern Learning Alliance; this has strengthened the executive membership of the steering group.

### **Three key challenges the school is currently facing**

- The site is still not secured and we may have to switch to another option.
- Not a problem yet but the delays caused by the site issue make it difficult to maintain.
- motivation and engagement on the steering group.

### **Links to any user-generated-content**

N/A

### **Name of key governance contact at the school**

Anne Constantine is the one trustee on the steering group which she chairs:

Anne Constantine, [anneconstantine1@aol.com](mailto:anneconstantine1@aol.com)

The clerk is Jenna Bickley – [jbickley@tmet.org.uk](mailto:jbickley@tmet.org.uk)

## Durham Mathematics School

### Attendees

- Sophie Daniels, Project Manager, Strategic Initiatives Delivery Unit, Vice Chancellor's Office, Durham University
- Alan Houston, Vice Provost (Education), Durham University
- Ellen Beveridge, Headteacher, Durham Sixth Form Centre; Lead on the Durham Mathematics School.

### School bio

**Name of linked university:** Durham University

**Current/envisioned number of students in each year group:** max. 75

### **Mission/vision statement**

"The Durham Mathematics School will be an outstanding specialist maths school. Its mission is to provide young people from the North East and Cumbria with the opportunity to excel in mathematics by creating an inclusive and diverse community in which educational engagement, attainment and enjoyment is promoted, enabling vibrant futures at university and in employment."

### **Three key achievements from the last 12 months**

- Site identification – a long and arduous process requiring significant negotiations locally has enabled us now to have finally identified a site – we are now in negotiation period for site acquisition.
- Positive engagement with local MP to share vision of the school and raise awareness of critical widening participation mission. This understanding is integral for facilitating positive dialogue with other local, high-performing schools.
- Sustained commitment from Trust and critical partners during a time of significant uncertainty, both because of Covid and the site challenges.

### **Three key challenges the school is currently facing**

- Site confirmation – potentially challenging formal negotiations; if these are unsuccessful, we will find it challenging to find an alternative site due to the site search limitations.
- Timescales – we had hoped to open in 2022, but site identification was more challenging than anticipated. If negotiations are long and complex, we may not hit our revised 2023 opening date.
- Local school support/buy-in – there will be continuing challenges on getting the support of local high performing schools who may perceive the school as a threat.

### **Links to any user-generated-content**

None yet as still early in pre-opening stages. Currently, we only have content we have produced and provided via our dedicated website: <http://www.durham-mathematics-school.org.uk/>

### **Name of key governance contact at the school**

Ellen Beveridge (Director of Providence Learning Partnership – the MAT being established into which the DMS and partner School Durham Sixth Form Centre will sit).

## Imperial College London Maths School

### Attendees

- Sugra Alibhai, Principal of Woodhouse College and CEO of Frontier Learning Trust
- Richard Craster, Dean of the Faculty of Natural Sciences, Imperial
- Peter Green, Chair of Governors
- Emma McCoy, Governor of the Imperial College Mathematics School; Interim Vice-Provost (Education & Student Experience)
- Andrew Tebbutt, Director of Outreach, Imperial

### **School bio**

**Name of school:** Imperial College London Maths School

**Name of linked university:** Imperial College London

**Current/envisaged number of students in each year group:** Opening in 2023 with an eventual aim of 100 in each year group.

### **Mission/vision statement**

The Imperial College London Mathematics School will increase the pipeline of skilled mathematicians by offering an excellent education in mathematics and beyond. The school will provide a diverse range of young people with access to a unique educational experience, equipping them to enter programmes at highly selective universities and to develop careers in STEM.

### **Three key achievements from the last 12 months**

- Partnership/collaboration between Imperial College London and Woodhouse College.
- Formation of new academy trust to oversee Woodhouse and the new maths school.
- Rapid progress on building design project and steering group subgroups.

### **Three key challenges the school is currently facing**

- Attempts to persuade DfE to fund accommodation block
- Marketing new school in a highly competitive area filled with outstanding providers
- Ensuring the existing College (on the same site) does not feel marginalised when the spotlight is on the maths school for the next few years.

### **Links to any user-generated-content**

N/A

### **Name of key governance contact at the school:**

Peter Green, chair of Frontier Learning Trust

## Lancaster University School of Mathematics

### Attendees

- Alex Belton, Head of Department, Mathematics and Statistics, Lancaster University
- Vicky Bryant, Vice Principal, Cardinal Newman College,
- Bob Deed, Interim Company Secretary of the Rigby Education Trust
- Len Hampson, Chair of Trustees, the Rigby Education Trust

### School bio

**Name of linked university:** Lancaster University

**Current/envisaged number of students in each year group:** 130

#### **Mission/vision statement**

Our vision is to provide an environment where an increasing number of world class mathematicians thrive and go on to contribute, through mathematics, to the productivity of the UK economy.

Our mission is to enable the most able mathematicians from all backgrounds to realise their potential within an inspiring, inclusive, and supportive learning community.

#### **Three key achievements from the last 12 months**

- Establishment of the Rigby Education Trust (the School's governing trust) and appointment of Members and Trustees.
- Submission of revised Education Brief to DfE.
- DfE approval of self-delivery case and feasibility study, site acquisition and appointment of preferred bidder.

#### **Three key challenges the school is currently facing**

- Completion of building to schedule
- Recruitment of the initial cohort
- Ensuring the links between the School and Cardinal Newman College are mutually beneficial

#### **Links to any user-generated-content**

<https://lusom.ac.uk/>

#### **Name of key governance contact at the school**

Nick Burnham: [nburnham@cardinalnewman.ac.uk](mailto:nburnham@cardinalnewman.ac.uk)

## **Leeds Mathematics School**

### **Attendees**

- Richard Amos, Strategic Lead, the GORSE Academies Trust
- Louise Banahene, Head of Educational Engagement, Leeds University
- Jon Fyffe, Project Manager of the implementation of the Leeds Mathematics School, the GORSE Academies Trust
- Kurt Langfeld, Member of the opening board; lead of the School of Mathematics at the University of Leeds; trustee of Liverpool Maths School
- Margit Messmer, Teaching Fellow, Leeds University; Academic link with the Maths Department at University of Leeds

### **School bio**

**Name of school:** Leeds Mathematics School (LMaS)

**Name of linked university:** University of Leeds

**Current/envisaged number of students in each year group:** Envisaged - 120

#### **Mission/vision statement**

Leeds Mathematics School (LMaS) will transform the opportunities for highly numerate young people in the Leeds city region. At the heart of its work will be an unrelenting focus on raising the participation of underrepresented groups, especially girls and the disadvantaged, in Advanced Mathematics. In this way LMaS will become an important enabler of social mobility.

#### **Three key achievements from the last 12 months**

- Formation of a strong partnership with University of Leeds
- Entry into pre-opening phase
- Securing a building for the school

#### **Three key challenges the school is currently facing**

- Building relationships within the wider maths school networks
- Gaining a greater understanding of the maths school vision at a national level

#### **Links to any user-generated-content**

To be shared with other organisations over the course of the day

#### **Name of key governance contact at the school**

David Holtham – Executive Principal Post-16 Education



## **Surrey Mathematics School**

### **Attendees**

- Andrew Isherwood, Vice Chair of Athena Schools Trust
- John Yeomans, Trustee
- Andrew Roach, GEP Director of Education
- Ian Roulstone, University of Surrey, Professor of Mathematics

### **School bio**

**Name of school:** Surrey Maths School

**Name of linked university:** University of Surrey

**Current/envisaged number of students in each year group:** 100 in each year group

#### **Mission/vision statement**

This has yet to be articulated and confirmed.

#### **Three key achievements from the last 12 months**

- Central Guildford school site has been sourced – great access, high quality
- Detailed plans for the school site are nearing completion
- School specific brief nearing completion

#### **Three key challenges the school is currently facing**

- Challenges of the planning process
- Hard to establish a firm opening date – although aiming for September 2023

#### **Links to any user-generated-content**

Too early to share any specific user-generated-content at this stage.

#### **Name of key governance contact at the school**

John Yeomans [jyeomanstrustee@gepacademies.com](mailto:jyeomanstrustee@gepacademies.com)

What do you wish to learn and hear from the day?

Some responses from participants:

" Using the expertise and success of the maths school to improve maths achievement in London schools. "

" Share experiences and either give or receive support. Networking with other governors especially clerks. "

" How to engage most effectively with other local schools unfamiliar with or wary of maths schools. "

" Ensuring the maths school doesn't impinge on recruitment for other maths schools. "

" Learn more about the work of the established maths schools and use this to support our strategic thinking. "

" Understanding governance, particularly in a maths schools setting. "

" Any policy changes at the Department of Education. "

We look forward to meeting you on 30 April 2021 to build on the maths schools ' network and collaborate further.