HOW TO FIND US

MOST OF OUR LECTURES WILL TAKE PLACE AT BARNARD'S INN HALL, BUT A MINORITY MAY TAKE PLACE AT OTHER VENUES, ALL IN CENTRAL LONDON. PLEASE CHECK OUR WEBSITE FOR DETAILS BEFORE BOOKING.



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2023-24



G R E S H A M

GRESHAM COLLEGE LECTURES 2023–24

Highlights in this year's programme include a series on The Political Imagination: Ancient Greek Ideas by the classicist Professor Melissa Lane; Magic, the Supernatural and the Lost Gods of Europe by Professor Ronald Hutton; a series on Evolution: The Big Questions both in and led by humans - from Professor Robin May; The Nature of Music by Professor Milton Mermikides, which will explore how music works; and Discovering the Universe by Professor Chris Lintott. which will take us from the first light in the Universe to interstellar voyager 'Oumuamua, the hellish wastes of Venus and the fountains of Enceladus

Maths Professor Sarah Hart will look at Games, Puzzles, Paradox and Proof in her lectures, from board games, to sudoku and how to "prove" that 1=0. In his series Hard Choices. Law Professor Leslie Thomas KC will examine ethical dilemmas in law, from abortion to capital punishment. Business Professor Raghavendra Rau will cover The Big Ideas in Finance, whilst IT Professor Victoria Baines will cover cybercriminals, the Singularity and more in Tech Change: A Survival Guide.

Our Visiting Professors this year include Dominic Broomfield-McHugh, who will be discussing Twentieth-Century Divas including Shirley Bassey and Barbra Streisand, and Chris Whitty, who will focus on Medicine After Disasters. Other series will look at Migration. Ethics in AI, New Hope in Cancer, Modern Iran, Legacies of Toxic Waste and Neurodiversity: ADHD, Dyslexia and Autism. Our Black History Month series this year looks at literature, including the Harlem Renaissance and the Windrush writers.

SCHOOLS OUTREACH AND ORACY COMPETITION

You can book school groups for lectures or register interest in our Year 12 oracy competition at schools@gresham.ac.uk. We are also starting schools-only events; find out more on gresham.ac.uk/schools.

THANK YOU TO OUR SPONSORS

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PROGRAMME SUMMARY

Put the shortlink (e.g. gres.hm/plato-office) into your browser to go straight to the webpage for the lecture.

SEPTEMBER 2023

13 Sep '23 C. Lintott Discovering Galaxies 14 Sep '23 M. Mermikides Why Music Moves Us 19 Sep '23 V. Baines Cybercriminals 20 Sep '23 R.Hutton Ancient Goddesses of Sex and War 21 Sep '23 A. Phippen Can Al Protect Children Online? 25 Sep '23 I. Mudway Microplastics 26 Sep '23 M. Allen When Net Zero? 28 Sep '23 L. Thomas The Death Penalty

OCTOBER

2 Oct '23 R Rau Net Present Value 3 Oct '23 M. McIntosh Writing after Windrush 4 Oct '23 R. May Big Evolutionary Ideas 5 Oct '23 K. Dossett Women of the Harlem Renaissance 10 Oct '23 S. Hart The Maths of Board Games 11 Oct '23 S. Wachter How Al Disrupts the Law 12 Oct '23 M. Krishnan Literary Activism in Africa 17 Oct '23 A. Ansari Iran's 1906 Revolution 18 Oct '23 D. Kent et al. Astronomy & Maths Communities 19 Oct '23 M. Lane Plato and the Idea of Political Office 24 Oct '23 V. Baines Brain Computer Interfaces 25 Oct '23 C. Lintott The Marvels of the Solar System 26 Oct '23 D. Broomfield-McHugh Barbra Streisand 31 Oct '23 M Daunton Markets and Marxism NOVEMBER

7 Nov '23 T. Holland Pilgrimages and Pandemics 8 Nov '23 R. Hutton Pagan Goddesses in Europe 9 Nov '23 M. Mermikides Musical Time, Rhythm and Groove 13 Nov '23 R. Rau Portfolio Theory 14 Nov '23 R. Alvandi The Iranian Revolution 15 Nov '23 R. May Random Chance in Evolution 20 Nov'23 The Lord Mayor The Annual Lord Mayor's Event 21 Nov '23 S. Hart Sudoku and Latin Squares 21 Nov '23 M. Allen Why 1.5°C Matters 22 Nov '23 R. Evans Antisemitic Conspiracy Theories 28 Nov '23 C. Whitty Nuclear, Radiological & Chemical 29 Nov '23 S. Holliday Iran: Woman, Life, Freedom 30 Nov '23 L. Thomas Abortion Law

DECEMBER

4 Dec '23 I. Mudway Forever Chemicals

5 Dec '23 V. Baines The Massive Internet of Things gres.hm/massive-internet 6 Dec '23 D. Broomfield-McHugh Have Yourself A Merry Little Xmas gres.hm/merry-little

JANUARY 2024

9 Jan '24 C. Messiou Al and Cancer Imaging 10 Jan '24 R. May One Species of Human? 11 Jan '24 M. Lane Ancient Greek Ideas of Justice 18 Jan '24 M. Mermikides Art & Science of Tuning 22 Jan '24 R. Rau Capital Structure Theory 23 Jan '24 S. Popat Genomics and Cancer Care 24Jan '24 C. Lintott 'Oumuamua 30 Jan '24 S. Hart Maths Puzzles and Paradoxes 30 Jan '24 M. Allen Climate Change and Weather

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gres.hm/cancer-genomics ares.hm/oumuamua gres.hm/maths-puzzles gres.hm/weather-change

FEBRUARY

1 Feb '24 L. Thomas LGBT Rights gres.hm/lgbt-law 5 Feb '24 N. Awan Visual Politics of Refugeehood gres.hm/visual-politics-refugees 6 Feb '24 M. Daunton Asian Tigers gres.hm/export-growth 7 Feb '24 R. May Human Evolution gres.hm/human-evolution 8 Feb '24 M. Snowling Dyslexia and Language ares.hm/dyslexia-language 13 Feb '24 V. Baines Sex and the Internet gres.hm/internet-sex 14 Feb '24 R. Hutton Dragons: A History gres.hm/dragons 15 Feb '24 J. Larkin Immunotherapy gres.hm/immunotherapy 19 Feb '24 S. Rosenberg-Jansen Refugee Camp Energy gres.hm/refugee-energy 20 Feb '24 C. Whitty Health after Earthquakes ares.hm/earthquakes-volcanoes 21 Feb '24 C. Lintott The Radio Sky gres.hm/radio-sky 22 Feb '24 M. Mermikides Scales and Modes gres.hm/scales-modes 26 Feb '24 R. Rau Option Pricing Theory gres.hm/option-pricing 28 Feb '24 F. Happé Autism gres.hm/new-autism 29 Feb '24 L. Thomas Wealth Inequality and Law ares.hm/wealth-law MARCH gres.hm/maths-coincidence ares.hm/tipping-points gres.hm/ritual-nudity gres.hm/greek-equality gres.hm/cancer-hope gres.hm/democracy-ancient gres.hm/immigration-detention gres.hm/data-protection

5 Mar '24 S. Hart The Maths of Coincidence 5 Mar '24 M. Allen Climate Tipping Points 6 Mar '24 R. Hutton Ritual Nudity 7 Mar '24 M. Lane Equality under the Law 11 Mar '24 P. Hill ADHD 12 Mar '24 Panel Discussion New Hope in Cancer 14 Mar '24 M. Lane Democracy 18 Mar '24 G. Constantine Immigration Detention 19 Mar '24 V. Baines Data Protection 20 Mar '24 R. May Human-Led Evolution 21 Mar '24 D. Broomfield-McHugh Shirley Bassey 25 Mar '24 I. Mudway Lead: A Toxic Legacy

APRIL

9 Apr '24 M. Daunton Import Substitution gres.hm/import-substitution 10 Apr '24 C. Lintott Is it Aliens? 11 Apr '24 D. Broomfield-McHuah Julie Andrews 16 Apr '24 M. Allen Geopolitics of Climate Change 18 Apr '24 L. Thomas Refugees and Law 24 Apr '24 R. Hutton The Western Magical Tradition 25 Apr '24 M. Mermikides Musical Consonance & Dissonance gres.hm/music-consonance

MAY

7 May '24 V. Baines The Next Fifty Years of Tech 8 May '24 R. May Evolution Tomorrow and Beyond 14 May '24 S. Hart Maths Illusions 14 May '24 C. Whitty Health after Extreme Cold 16 May '24 M. Mermikides Is Music Infinite? 20 May '24 R. Rau Asymmetric Information 21 May '24 M. Allen A Just and Inclusive Net Zero 22 May '24 O. Johnson Logarithms 23 May '24 L. Thomas Race, Disability and Education 29 May '24 C. Lintott Revealing the Early Universe 30 May '24 M. Lane Experts in Politics

JUNE

4 Jun '24 S. Hart A Mathematician's View of Proof 5 Jun '24 R. Hutton Witch-Hunting 10 Jun '24 R. Rau Are Financial Markets Efficient? 13 Jun '24 M. Lane Thinking about Climate Change 17 Jun '24 Details tbc The Gray's Inn Reading 2024 19 Jun '24 M. Elliott Provost's Lecture 20 Jun '24 Details the Sir Thomas Gresham Lecture

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GRESHAM COLLEGE HISTORY



Gresham College was London's first institute of higher education when it was founded in 1597 under the terms of Sir Thomas Gresham's will. Unusually for the time, Gresham lectures were free and given in both English and Latin – most other higher education of the period was in Latin only – making it accessible to anyone who had the time to attend. It has been providing free education to the public ever since.

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VENUES

This year, we are not publishing venues for all the lectures in this programme. The majority will be held in Barnard's Inn Hall, but other venues in central London may be used and will be announced closer to the dates of the lecture. All registered attendees will be notified of the venue once they are announced.

REGISTER FOR 2023-24 LECTURES

All our lectures are free. We will live stream all our lectures in 2023–24 and will also be taking bookings for in-person attendance. Registration for live-stream events is available for all events now, via our website.

All lectures are ticketed. Registration for in-person tickets normally opens on the website one month ahead of the lecture date. We over-issue tickets because of noshows, so please be aware a ticket will not guarantee entry.

SCHOOL AND COLLEGE BOOKINGS FOR LIVE LECTURES

We offer free school and college group bookings for most lectures. Please email: <u>schools@gresham.ac.uk</u>

ATTENDING IN PERSON

Doors open 30 minutes ahead of the lecture. Please be ready to be seated at least 10 minutes before the start of the lecture. For most lectures, if there are no tickets available you can turn up for returns on the door.

Where there are seats available, the last admission is 10 minutes after the start of the lecture. We do not allow people to save seats.

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ASTRONOMY

DISCOVERING THE UNIVERSE

gres.hm/discover-universe

CHRIS LINTOTT GRESHAM PROFESSOR OF ASTRONOMY

Island Universes: Discovering Galaxies Beyond the Milky Way		
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First Light: Revealing the Early Universe		
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gres.hm/evolution-questions

ROBIN MAY GRESHAM PROFESSOR OF PHYSIC

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<u>c</u>	res.hm/finance-ideas
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ECONOMICS

COLD WAR, DECOLONISATION AND ECONOMIC TRANSITIONS

gres.hm/economic-transitions

MARTIN DAUNTON VISITING PROFESSOR OF ECONOMIC HISTORY

Markets and Marxism: USA, USSR and China 6 pm Tuesday 31 October 2023

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Asian Tigers: Export-Led Growth

6 pm Tuesday 6 February 2024

Import Substitution: A Failed Strategy for Growth?

6 pm Tuesday 9 April 2024

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ENVIRONMENT

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Living with the Forever Chemicals

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Lead: A Toxic Legacy

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HISTORY

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<u>gres.hm/ma</u>	<u>gic-europe</u>	
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	gres.hm/law-ethics
LESLIE THOMAS KC GRESHAM PROFESSOR OF LAW	
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The Gray's Inn Reading 2024 6 pm Monday 17 June 2024

MATHEMATICS

GAMES, PUZZLES,	PARADOX AND PROOF
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gres.hm/games-puzzles

SARAH HART	
GRESHAM PROFESSOR OF GEOMETRY	

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Oliver Johnson 6 pm Wednesday 22 May 2024

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In partnership with Novartis	
<u>gres.hm/ho</u>	<u>ope-cancer</u>
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MILTON MERMIKIDES GRESHAM PROFESSOR OF MUSI	с
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DOMINIC BROOMFIELD-MCHUGH	
VISITING PROFESSOR OF FILM AND THEATRE MUSIC	

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In partnership with the Independent Soci	al Research Foundation	
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Sarah Rosenberg-Jansen		
6 pm Monday 19 February 2024	See page 43	
The Human Cost of Immigration Dete	ention	

Greg Constantine 6 pm Monday 18 March 2024

TECHNOLOGY

TECH CHANGE: A SURVIVAL GUIDE	TECH	CHANGE:	A SURVIVAL	GUIDE
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gres.hm/tech-change

VICTORIA BAINES
IT LIVERY COMPANY PROFESSOR OF
INFORMATION TECHNOLOGY

Meet the Cybercriminals

6 pm Tuesday 19 September 2023 See page 17

Brain Computer Interfaces 6 pm Tuesday 24 October 2023

The Massive Internet of Things 6 pm Tuesday 5 December 2023

<u>Sex and the Internet</u> 6 pm Tuesday 13 February 2024

Data Protection for Thrillseekers 6 pm Tuesday 19 March 2024

The Next Fifty Years of Tech 6 pm Tuesday 7 May 2024

ETHICS IN AI

Can Al Protect Children Online? Andy Phippen 6 pm Thursday 21 September 2023

How Al Disrupts the Law Sandra Wachter 6 pm Wednesday 11 October 2023 See page 34

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<u>gres.hm/ethics-ai</u>

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SEPTEMBER



6 pm Wednesday 13 September 2023 **Venue tbc**

Island Universes: Discovering Galaxies Beyond the Milky Way

*⊘*gres.hm/galaxies-beyond

Chris Lintott Gresham Professor of Astronomy

The discovery that we live in an ordinary galaxy, one of several hundred billion in the observable Universe, instigated a profound change in thinking about our place in the Universe. This first lecture covers the Great Debate of the early twentieth century as new telescopes and new ways of observing the cosmos put our Milky Way in its place; and looks at how subsequent observations helped us understand how galaxies like our own formed and evolved.



6 pm Thursday 14 September 2023 LSO St Luke's

Why Music Moves Us

¿gres.hm/music-moves

Milton Mermikides Gresham Professor of Music

How is music able to convey and trigger such range and depth of emotion? Why does it elicit joy, sorrow, consolation and the chills? Employing research and theoretical models from neuroscience, psychology and musicology, we examine the extraordinary ways that primal and conditioned listening combine to such complex emotive effect. Examples from pop, jazz, rock, film, global, traditional and classical forms are presented under the light of nostalgia, visual imagery, emotional contagion, rhythmic entrainment, aesthetics, expectation and the extramusical.

Venue kindly subsidised by LSO.



Meet the Cybercriminals

⊘gres.hm/cybercriminals

Victoria Baines IT Livery Company Professor of Information Technology

Portrayals of hackers in the movies lead us to believe that cybercriminals are young white males who wear hoodies. The cybercriminal population is actually much more diverse in terms of gender, ethnicity, age, neurodiversity and other aspects. Motivations range from the ideological, to profit, to mischief and back again. We will meet the cybercriminals in all their variety and discover how a better understanding of their demographics and drivers can help citizens, businesses and governments protect themselves.

Ancient Goddesses of Sex and War

Ronald Hutton Gresham Professor of Divinity

This lecture looks at a series of divine female figures in the ancient world from the Middle East to Western Europe: Inanna, Ishtar, Astarte, Aphrodite and Venus. What they have in common is that, to varying degrees, they all combined the personae of deities of sexual love and of war. It brings out the special characteristics of each, traces the relationships between them, and shows how each in the sequence influenced the development of the next.

6 pm Wednesday 20 September 2023 **Venue tbc**

6 pm Tuesday 19 September 2023 **Barnard's Inn Hall**



6 pm Thursday 21 September 2023 Barnard's Inn Hall

Can Al Protect Children Online?

*⊘*gres.hm/ai-children

Andy Phippen

Could artificial intelligence be used to tackle online harms to children? What are the specific "solutions" Al could offer – for example, age verification, preventing the sending of intimate images, and stopping the promotion of harmful content – and what would applying these look like in practice? What ethical dilemmas and rights challenges does this raise? What do policymakers need to understand to develop good policy around Al? Are alternatives – like image hashing – potentially more effective?



6 pm Monday 25 September 2023 **Barnard's Inn Hall**

Microplastics: Public Health Myth or Menace

⊘gres.hm/microplastics-health

Ian Mudway Gresham Visiting Professor of Environmental Health

Microplastics – tiny plastic particles less than 5 mm long – were first identified in the ocean, but are now known to be ubiquitous throughout the environment, within soil, air, food and water. Recently, microplastics have been detected in human blood, placenta and other tissues (liver, lung, colon), raising concerns about potential adverse health effects. This lecture reviews the science on microplastics and whether we should be concerned about them, compared with other known environmental hazards.



When Net Zero? The Climate Braking Distance

¿gres.hm/when-net-zero

Myles Allen Frank Jackson Foundation Professor of the Environment

The accumulation of carbon dioxide in the atmosphere determines what global temperature is reached. So, just like a braking distance, future warming is determined by global emissions today, the year we start emission reductions, and the year we achieve net zero. The goal of climate policy is no longer up for debate: we have to reduce global emissions to net zero. We just need to decide when and how fast.

The Death Penalty: A Colonial Relic?

⊘gres.hm/death-law

Leslie Thomas Gresham Professor of Law

This lecture explores the death penalty's roots, its abolition in England and Wales, and its continuation in the Commonwealth Caribbean. Analysing the Privy Council's role in perpetuating this practice, this punishment is examined closely. Is it a colonial relic which reinforces societal injustices? Is it time for its complete abolition?



6 pm Thursday 28 September 2023 **Barnard's Inn Hall**





6 pm Monday 2 October 2023 Barnard's Inn Hall

OCTOBER

Understanding Net Present Value

⊘gres.hm/net-present-value

Raghavendra Rau Mercers' School Memorial Professor of Business

In finance, everything comes down to promises. When you invest money, questions arise: how profitable will it be down the line, and is it worth investing today? Determining the exact amount of those returns and whether investing is worthwhile can be challenging. This lecture will introduce the concept of Net Present Value. It will discuss how NPV helps managers satisfy shareholders without direct interaction, and how it can evaluate uncertain future payoffs in order to meet investor expectations.



6 pm Tuesday 3 October 2023 Barnard's Inn Hall

Writing after Windrush

⊘gres.hm/writers-windrush

Malachi McIntosh

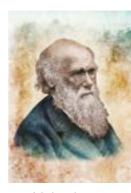
They came, they saw, they felt conquered. Turning to the later works of Samuel Selvon and George Lamming, and the writing of Andrew Salkey, Edward Kamau Brathwaite and Linton Kwesi Johnson, this lecture will reflect on the aesthetics of Caribbean emigrant authors. Considering how the form of their works reflected a changing Britain in the 1960s–80s, it will explore how their motifs, and themes of fragmentation and rupture, signal the emergence of a new Black British consciousness.

A Small History of Big Evolutionary Ideas

⊘gres.hm/evolutionary-thinking

Robin May Gresham Professor of Physic

The theory of evolution is often described as the biggest idea in the history of humanity. But evolutionary theory itself has evolved over time, often via landmark contributions from some very unusual characters. This lecture investigates some of the biggest ideas about evolution, as well as some of the most ill-conceived. We'll meet aristocrats and criminals, clergymen and dictators, and consider how evolution is as much a product of history as it is of biology.



6 pm Wednesday 4 October 2023 **Barnard's Inn Hall**



Women of the Harlem Renaissance

∂gres.hm/women-harlem

Kate Dossett

In the early twentieth century, Black creatives were America's artistic vanguard. In the cultural movement known as the Harlem Renaissance, African Americans created new platforms to promote their work and learned to navigate white gatekeepers who controlled America's publishing and cultural industries. At the forefront of this movement, women were among its most radical thinkers: playwrights, poets, novelists and artists, such as Gwendolyn Bennett and Nella Larsen, explored new ways of thinking about motherhood, sexuality, bodily autonomy and racial violence. 6 pm Thursday 5 October 2023 **Barnard's Inn Hall**



1 pm Tuesday 10 October 2023 **Barnard's Inn Hall**

6 pm Wednesday 11 October 2023 Barnard's Inn Hall

The Maths of Board Games

⊘gres.hm/maths-games

Sarah Hart

Gresham Professor of Geometry

Why are there chess Grandmasters, but not Grandmasters of noughts and crosses (otherwise known as tic-tac-toe)? It is because chess is "harder" – but what do we really mean by that? Answering that question leads us to develop the idea of mathematical complexity, which is a measure of how "big" a game is. We'll look at the complexity of popular games, and ask: what is the hardest game of all time?

How AI Disrupts the Law

⊘gres.hm/technology-law

Sandra Wachter

Artificial intelligence and generative AI are changing our lives and society as a whole, from how we shop, to how we access news and make decisions. Are current and traditional legal frameworks and new governance strategies able to guard against the novel risks posed by new systems? How can we mitigate AI bias, protect privacy and make algorithmic systems more accountable? How are data protection, nondiscrimination, free speech, libel and liability laws standing up to these changes?



Literary Activism in Contemporary Africa

⊘gres.hm/literary-africa

Madhu Krishnan

Literature has always played a key role in social and political life in Africa, even when it is not deliberately or obviously activist in its aims or form. African writers like Ngũgĩ wa Thiong'o, Chinua Achebe, Obi Wali and poets Christopher Okigbo and Stella Nyanzi have long been seen as key thinkers and engaged intellectuals. Tracing this history, this lecture shows how creative work changes society and discusses the role of literary collectives such as Chimurenga, Jalada, and Bakwa.

Iran's Constitutional Revolution of 1906

∂gres.hm/iran-1906

Ali Ansari

Iran's first revolution in 1906 provided the country with a constitution and parliament, laying the foundations for its political development over the next century. Although overshadowed by the later Islamic Revolution of 1979, it was the Constitutional Revolution – modelled on the British constitution and British political ideas – that gave birth to the modern state and shaped future political development. This lecture will explore the ideas that shaped the revolution and its lasting legacy on Iranian politics. 6 pm Thursday 12 October 2023 Barnard's Inn Hall



6 pm Tuesday 17 October 2023 **Barnard's Inn Hall**



4–7 pm Wednesday 18 October 2023 Barnard's Inn Hall

Astronomy and the Forging of Mathematical Communities

∂gres.hm/bshm-2024

Deborah Kent, Laure Miolo, Eva Kaufholz-Soldat

In partnership with The British Society for the History of Mathematics.

This event will focus on the relationship between astronomical research and the forging of mathematical communities. The keynote speaker, Professor Deborah Kent (6 pm) will present on *Nineteenth-Century Eclipse Expeditions*. This will be preceded by shorter presentations by Dr Laure Miolo (4 pm) on *Shaping Mathematical Practices of the Science of the Stars*, and Dr Eva Kaufholz-Soldat (4.30 pm) on *Victorian Era Astronomy: On Land and in the Skies*.

Plato and the Idea of Political Office

⊘gres.hm/plato-office

Melissa Lane Gresham Professor of Rhetoric

Is politics merely a gaslighting of the oppressed, a cloak for the rulers to exploit the ruled? Plato's *Republic* confronted the challenges of political office (*archē*). By working through the ideas of this dialogue and comparing them to the present day, the lecture offers a new way of understanding the role of officeholders and the ethical demands placed on them. It argues that Plato took the risk of abuse of power far more seriously than has been generally recognised.



6 pm Thursday 19 October 2023 **Barnard's Inn Hall**

Brain Computer Interfaces

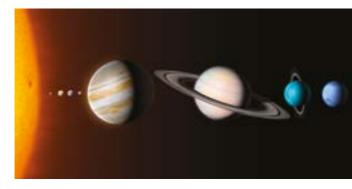
*⊘*gres.hm/brain-computer

Victoria Baines IT Livery Company Professor of Information Technology

Our brains are computers. What if we could enhance their processing power? Medical technology now allows for brain signals to be read and translated to reverse paralysis. Deep brain stimulation is also used to treat diseases such as Parkinson's. Neural interfaces are already improving lives. How do they work? What's next for our physical connection to digital technology? And what are the implications of having new hardware in our heads?



6 pm Tuesday 24 October 2023 **Barnard's Inn Hall**



The Marvels of the Solar System

⊘gres.hm/solar-marvels

Chris Lintott Gresham Professor of Astronomy

Our exploration of the Solar System has revealed a remarkable diversity of landscapes, from the frozen deserts of Mars, which billions of years ago ran with water, to the hellish surface of Venus and the strange hydrocarbon seas of Saturn's largest moon, Titan. In our voyages to these places we have discovered what may be the most common home for life in the Universe – the ice-covered oceans found in many of Jupiter and Saturn's moons. 6 pm Wednesday 25 October 2023 **Venue tbc**



6 pm Thursday 26 October 2023 Barnard's Inn Hall

Twentieth-Century Divas: Barbra Streisand

<mark>⊘gres.hm/streisand</mark>

Dominic Broomfield-McHugh Visiting Professor of Film and Theatre Music

Since her debut in *Funny Girl*, her bold vision and uncompromising control of her entire artistic output have made Barbra Streisand highly successful – and have sometimes sparked controversy. Despite her popularity and numerous awards, she has been stigmatised in the entertainment industry as a "diva". Streisand's work as a producer and director have shattered the glass ceiling and reshaped our idea of what a diva is today, but not without personal cost.



6 pm Tuesday 31 October 2023 **Barnard's Inn Hall**

Markets and Marxism: USA, USSR and China

*⊘*gres.hm/ussr-china

Martin Daunton

Visiting Professor of Economic History

Different models of economic modernity competed during the Cold War. Washington feared that the transition from colonial peasant societies would provide an opening for Marxists, as in Vietnam. But by 1989, the Soviet economic model was in crisis and attempts to create a market economy led to Putin's kleptocracy. In China, the disaster of Mao's Great Leap Forward was followed by successful transformation. Why did the Soviet Union fail where China succeeded?

NOVEMBER



Pilgrimages, Pandemics and the Past

⊘gres.hm/pilgrimages-holland

6 pm Tuesday 7 November 2023 **Barnard's Inn Hall**

Tom Holland

In Partnership with The Royal Historical Society.

Between us and the medieval men and women who went on pilgrimage there stand many impediments to understanding: the Reformation, the Enlightenment, secularisation. This lecture will explore how tracing ancient routes on foot, and experiencing travel as people did in an age before trains and cars, can offer insights into the past. But is the sense of being accompanied by ghosts a delusion? Tom Holland will draw on experiences of reading Chaucer and undertaking pilgrimages during and after the pandemic.

Were There Pagan Goddesses in Christian Europe?

⊘ gres.hm/pagan-goddesses

Ronald Hutton Gresham Professor of Divinity

This lecture considers a set of superhuman female figures found in medieval and early modern European cultures – Mother Nature, the roving nocturnal lady often called Herodias, the British fairy queen and the Gaelic Cailleach. None seem to be surviving ancient deities, and yet there is nothing Christian about any of them either. Do they force us to reconsider our own existing terminology when writing the religious history of Europe?



6 pm Wednesday 8 November 2023 **Venue tbc**



6 pm Thursday 9 November 2023 **LSO St Luke's**

The Poetry of Prediction: Musical Time, Rhythm and Groove

<mark>⊘gres.hm/music-groove</mark>

Milton Mermikides Gresham Professor of Music

Music is a temporal art, unfolding like a ribbon and transforming our experience of time itself. This lecture demonstrates how music harnesses our unique and intricate listening faculties, creating a complex interplay between sounding events and our internal predictions. This forms a predictive tapestry whereby the listener – usually unconsciously – "explains" temporal events in reference to multi-layered streams of expectational waves. How musicians exploit such expressive opportunities is explored in a wide range of musical styles.

Venue kindly subsidised by LSO.



6 pm Monday 13 November 2023 Barnard's Inn Hall

Portfolio Theory and the Capital Asset Pricing Model

Raghavendra Rau Mercers' School Memorial Professor of Business

Firms hope to raise money from investors to make investment decisions, and promise investors returns in exchange. Investors try to maximise the returns they get while simultaneously minimising their risk. How do investors decide on the price they are willing to pay? This lecture will introduce two key concepts of financial management: Portfolio Theory and Capital Asset Pricing Model, and will discuss how the CAPM gives us one of the inputs for NPV, the discount rate.



Reading and Misreading the Iranian Revolution

⊘gres.hm/iran-revolution

6 pm Tuesday 14 November 2023 **Barnard's Inn Hall**

Roham Alvandi

Why did the Iranian Revolution catch so many in the US and UK governments by surprise in 1978–79? Why were so many enthusiastic about the fall of the Shah? Why did so many Western observers – including Michel Foucault, Fred Halliday and Edward Said – misread Ayatollah Khomeini? This lecture examines readings and mis-readings of the Iranian Revolution in Europe and the United States from the perspective of today's uprising in Iran. Are we repeating the analytical mistakes of the past?



Random Chance in Evolution

⊘gres.hm/evolution-chance

Robin May Gresham Professor of Physic

Natural selection acts to ensure the "survival of the fittest". But random chance has also played a huge role in the history of life on Earth, from meteorite strikes to massive earthquakes. Randomness also lies at the core of evolutionary processes: the impact of a chance mutation, or the "lottery" of sexual selection. In this lecture, we'll look at some remarkable examples of evolutionary chance and reveal why they are sometimes less random than you might expect. 6 pm Wednesday 15 November 2023 **Barnard's Inn Hall**



6 pm Monday 20 November 2023 **Venue tbc**

The Annual Lord Mayor's Event @gres.hm/lord-mayor-24

The Lord Mayor of London and guests

An annual talk delivered by the President of Gresham College, The Rt Hon the Lord Mayor of the City of London. Further information will be available on our website soon.



1 pm Tuesday 21 November 2023 Barnard's Inn Hall

The Maths of Sudoku and Latin Squares

⊘gres.hm/maths-sudoku

Sarah Hart

Gresham Professor of Geometry

Millions of us regularly solve Sudoku puzzles. In this lecture, we discuss the mathematics behind them, and the links to other kinds of number grids, like magic squares and so-called Latin squares, which have been studied for centuries. Latin squares have many applications in areas as diverse as experiment design, algebra and coding theory.

Why 1.5°C Matters

*∂*gres.hm/degrees

Myles Allen Frank Jackson Foundation Professor of the Environment

On the eve of COP28 in Dubai, is the goal of limiting global warming to 1.5°C still alive? What does this mean and is it even possible? Given warming has reached 1.25°C, increasing at around ¼°C per decade, what happens if we miss our target? While every tenth of a degree matters, passing 1.5°C does not mean an inexorable slide into climate chaos, but every year's delay increases the clean-up bill for future generations.



6 pm Tuesday 21 November 2023 **Barnard's Inn Hall**



Antisemitic Conspiracy Theories: Past, Present and Future?

⊘gres.hm/antisemitic-conspiracy

Richard Evans

In partnership with the Wiener Holocaust Library

Antisemitism has existed and continues to exist on many levels, from unthinking prejudice to highly developed theories. Common to all levels is an explicit, or more often, implicit belief that all Jews, usually defined in racial terms, are conspiring secretly to undermine civilisation, order or social and cultural stability. This lecture considers the evolution of this conspiracy theory since the Middle Ages, examines its nature and operation today, and considers its future development. 6 pm Wednesday 22 November 2023 Barnard's Hall Inn



6 pm Tuesday 28 November 2023 **Barnard's Inn Hall**

Reducing Harms after Nuclear, Radiological and Chemical Incidents

⊘gres.hm/nuclear-chemical

Chris Whitty Visiting Professor of Public Health

Nuclear, radiological and chemical incidents have the potential to cause major harm. The risk of nuclear and radiological events causing health effects can usually be significantly reduced by relatively simple measures, which are based on the properties of the chemicals released, especially at a distance from the incident. Chemicals that can cause harm, such as organophosphate and mustard chemicals, need to be understood to mitigate the risks and establish medical countermeasures.



6 pm Wednesday 29 November 2023 Barnard's Inn Hall

Iran's "Woman, Life, Freedom" Movement

⊘gres.hm/iran-woman

Shabnam Holliday

The death of the Kurdish woman Jina Mahsa Amini in September 2022 sparked the largest protests in Iran since the establishment of the Islamic Republic of Iran. The protests threaten the legitimacy of the Islamic Republic as a political system. Beyond Iran, the protests have highlighted that Iranians reject gender-based, race-based and religion-based violence. In addition to addressing the complexity of these protests, the lecture will place them in historical and regional context.



Abortion: Law's Ethical Dilemma

*⊘*gres.hm/abortion-law

6 pm Thursday 30 November 2023 **Barnard's Inn Hall**

Leslie Thomas Gresham Professor of Law

This lecture delves into the history of abortion in English law, from common law to the Abortion Act 1967. Professor Thomas KC critically examines the current state of abortion law in England, the Commonwealth Caribbean and recent developments in the US. Is there a case for further liberalisation of abortion law?

DECEMBER

Living with the Forever Chemicals

⊘gres.hm/forever-chemicals

lan Mudwav Gresham Visiting Professor of Environmental Health

The forever chemicals, or PFAS (per- and polyfluorinated alkyl substances), represent a large family of highly persistent synthetic chemicals widely used in everything from carpets to non-stick cookware, to firefighting foams and furniture textiles. They are highly persistent in nature and have been found in the blood and breast milk of people and wildlife globally. They are linked to cancer, liver damage, decreased fertility and increased risk of asthma and thyroid disease. How can we reduce our exposure to them?

The Massive Internet of Things

∂gres.hm/massive-internet

Victoria Baines IT Livery Company Professor of Information Technology

Today, objects in smart cities, outer space and medical implants in our bodies are connected to the internet. When streetlamps can "talk", when autonomous vehicles safely navigate, and energy and public services can be automatically routed when and where they are needed, we will reap the rewards of a Massive Internet of Things (MIoT). How might we maximise the benefits while ensuring our data is protected and our networks are stable and secure?

Have Yourself a Merry Little Christmas

¿e gres.hm/merry-little

Dominic Broomfield-McHugh Visiting Professor of Film and Theatre Music

This lecture investigates how this song became so popular, transcending its roots in the MGM musical Meet Me in St Louis to become a presence in the canon of secular popular Christmas songs.

6 pm Monday 4 December 2023 **Barnard's Inn Hall**





6 pm Wednesday 6 December 2023 Barnard's Inn Hall



JANUARY

The AI Revolution in Cancer Imaging

⊘gres.hm/ai-cancer

Christina Messiou

In partnership with Novartis.

Al will be one of the most disruptive technologies, enabling safer, faster and more accurate healthcare. It will unlock smarter cancer imaging and new insights from medical scans that were indiscernible to the human eye. This lecture will demystify the Al technological revolution and explore "why now?" and how to ensure Al is deployed safely and meaningfully. It will discuss how Al deployed in radiology can empower healthcare professionals to provide compassionate and precision care for patients with cancer.



6 pm Tuesday 9 January 2024 **Barnard's Inn Hall**



Why is There Only One Species of Human?

<mark>⊘gres.hm/one-human</mark>

Robin May Gresham Professor of Physic

We are the only human species on the planet today. But for most of our history, we have not been alone. Fossil and genetic evidence has revealed a diverse and fascinating set of human-like species, from Neanderthals to Denisovans, to Homo Floresiensis (*The Hobbit*) and more. We'll meet many of them in this lecture, investigate why they died out and reveal why some of them are much closer relatives than you might think. 6 pm Wednesday 10 January 2024 **Barnard's Inn Hall**



6 pm Thursday 11 January 2024 **Barnard's Inn Hall**

Ancient Greek Ideas of Justice

Gresham Professor of Rhetoric

In the poetry of the Athenian lawgiver Solon, justice (*dikē*) was a boundary stone marking out terms that rich and poor alike could respect. Yet ancient Greek authors also recognised the danger that the powerful will simply exploit those less powerful, and that Greek societies enforced slavery. This lecture explores ancient Greek aspirations to justice – and how they fell short – as a call for recurrent interrogation of the terms governing power and vulnerability.



The Art and Science of Tuning @gres.hm/art-tuning

Milton Mermikides Gresham Professor of Music

This lecture presents the rich history of musicians' engagement with pitch. From the tuning systems of Babylon, Pythagoras and Hindustani ragas, through the temperaments of the Baroque and Classical eras and arriving at contemporary electronic, blues, jazz and global practices, we explore how musicians have organised, sliced and manipulated the pitch continuum for expressive effect. In so doing, we reveal the mechanics that determine the 12 notes of the piano keyboard and the beautiful spectrum of pitch colours between them.

Venue kindly subsidised by LSO.

6 pm Thursday 18 January 2024 **LSO St Luke's**



Capital Structure Theory Explained

∂gres.hm/capital-structure

Raghavendra Rau

Mercers' School Memorial Professor of Business

Knowing what the investors demand enables the firm to plan its financing. What type of instrument should it use? Should it issue debt or equity? This lecture will introduce the concept of Capital Structure Theory which tells the manager how to reduce capital cost by a correctly chosen mixture of debt and equity. The composition of the mixture depends on how much tax the firm pays and how it can use its financing to reduce those taxes.

6 pm Monday 22 January 2024 **Barnard's Inn Hall**

How Cancer Genomics is Transforming Cancer Care

⊘gres.hm/cancer-genomics

Sanjay Popat

In partnership with Novartis.

Using lung cancer as a case study, this lecture will explore the transformative impact of genomics on personalised cancer treatment. What are the challenges of implementing tumour sequencing in routine care, its effect on drug development, and how can we maximise clinical benefit? How is the new technology of circulating tumour DNA analysis (liquid biopsy) used by healthcare systems? What is the potential future impact of using DNA analysis to screen for cancers early?



6 pm Tuesday 23 January 2024 **Barnard's Inn Hall**



6 pm Wednesday 24 January 2024 **Venue tbc**

'Oumuamua: Our First Interstellar Visitor

<mark>⊘gres.hm/oumuamua</mark>

Chris Lintott Gresham Professor of Astronomy

In 2017, the Solar System was visited by an object named 'Oumuamua, which came from another star. The unusual properties of this first interstellar visitor led some to suggest it may be an alien spacecraft – but the truth is that its oddness is already teaching us lessons about how solar systems form. This lecture also considers the prospects of discovering more unusual objects in the Solar System, and what we might do about asteroids that threaten the Earth.

Mathematical Puzzles and Paradoxes

Sarah Hart Gresham Professor of Geometry

Many puzzles have a long history, such as water pouring puzzles, where you need to measure (for example) one pint of water equipped only with an eight-pint and a five-pint jug. The mathematics behind the solution has many useful applications. Meanwhile, paradoxes such as "some men shave themselves; those that do not shave themselves; those that do not shave themselves are shaved by the barber: who shaves the barber?" lead us to deep questions about set theory. We will discuss several examples and the related mathematics.



1 pm Tuesday 30 January 2024 **Barnard's Inn Hall**



How is Climate Change Affecting the Weather Now?

∂ gres.hm/weather-change

Myles Allen Frank Jackson Foundation Professor of the Environment

Climate change is already affecting us all, regardless of where we live, through changing risks of extreme weather events. This lecture will take a break from global climate policy to talk about the links between climate and weather, chaos theory and the practical tools available to quantify changing risks. There is a lot we still don't know – and a lot we could know, if only governments and the insurance industry were willing to pay for better climate risk information. 6 pm Tuesday 30 January 2024 **Barnard's Inn Hall**

FEBRUARY



6 pm Thursday 1 February 2024 **Barnard's Inn Hall**

LGBT Rights: Overcoming a Colonial Legacy

<mark>⊘gres.hm/lgbt-law</mark>

Leslie Thomas Gresham Professor of Law

Historically, lesbian, gay, bisexual and transgender (LGBT) people have been persecuted under English law. Homophobic and transphobic laws were exported from England to the Commonwealth Caribbean, and these colonial laws have had a longterm impact on Caribbean societies. This lecture will make the case for the robust constitutional protection of LGBT rights.

The Visual Politics of Refugeehood

⊘gres.hm/visual-politics-refugees

Nishat Awan

In partnership with the Independent Social Research Foundation.

Humanitarian agencies are increasingly relying on satellite imagery and testimonies from social media to understand and communicate why people feel compelled to seek refuge. This lecture will explore digital humanitarianism and the visual politics of refugeehood. It will discuss how such practices allow us to see the places where violence takes place, but often also serve to simplify complex situations. It will focus on undocumented migration from Pakistan towards Europe.



6 pm Monday 5 February 2024 **Barnard's Inn Hall**



Asian Tigers: Export-Led Growth

∂gres.hm/export-growth

Martin Daunton Visiting Professor of Economic History

Why have economies in East Asia been more successful in escaping from underdevelopment and achieving high levels of growth? Japan's experience of avoiding colonisation and creating a modern economy offered a model to other countries, some of whom had themselves been colonised by Japan – above all, South Korea. How did Japan and Korea create a successful model of export-led growth with a close connection between the state and business that was criticised by the IMF as "crony capitalism"? 6 pm Tuesday 6 February 2024 **Barnard's Inn Hall**



A 300,000-Year History of Human Evolution

⊘gres.hm/human-evolution

Robin May Gresham Professor of Physic

The species we recognise as our own – anatomically modern humans – has existed for only 300,000 years, a blink of an eye in evolutionary terms. And yet, during that time, our species has been shaped by strong evolutionary forces, often unwittingly as an indirect result of human activities. In this lecture, we'll find out how disease outbreaks, the rise of civilisation and even the invention of agriculture have left their traces in our DNA. 6 pm Wednesday 7 February 2024 **Barnard's Inn Hall**



6 pm Thursday 8 February 2024 **Barnard's Inn Hall**



6 pm Tuesday 13 February 2024 **Barnard's Inn Hall**



6 pm Wednesday 14 February 2024 **Venue tbc**

Dyslexia and Language – Disorder or Difference?

<mark>⊘gres.hm/dyslexia-language</mark>

Maggie Snowling

Difficulties with reading and writing have wide-ranging effects beyond academic achievement, including on career opportunities and personal well-being. However, the concept of dyslexia continues to be debated: is the term useful? How does it relate to spoken language? This lecture describes what is known of the causes and consequences of reading difficulties and how they relate to other common conditions that affect learning. It will look at the importance of early intervention and how best to support children with dyslexia.

Sex and the Internet

⊘gres.hm/internet-sex

Victoria Baines IT Livery Company Professor of Information Technology

The relationship between intimacy and technology is dynamic and transformative. Adult entertainment providers were early adopters of the Internet and directly influenced its development. Meanwhile, digital communication has changed our consumption of pornography, how we date and how we seek pleasure. There is increasing concern that Internet-mediated sex is having a negative impact on humans. What's the evidence for that? And what does the future hold?

Dragons: A History

*⊘*gres.hm/dragons

Ronald Hutton Gresham Professor of Divinity

Why have people believed in dragons, and what were they actually? Is there a difference between Western and Eastern dragons, in a global perspective and, if so, why? Has the Western attitude to dragons changed in the modern era? Did Christianity give rise to a different idea of what a dragon should be? These are the questions that this lecture sets out to answer.



Immunotherapy: Cure for Metastatic Cancers?

⊘gres.hm/immunotherapy

James Larkin

In partnership with Novartis.

Immunotherapy has brought new hope for curing common cancers that have spread (metastatic) – once regarded as impossible. Over the last 10 years, immune checkpoint inhibitors – drugs that allow the immune system to identify and destroy previously unrecognised cancer cells – have been successfully used to treat melanoma, kidney cancer and lung cancer, among others. Clinicians are looking at whether vaccines, oncolytic viruses and cellular therapies could cure cancer. This lecture explores the scientific basis for this progress.

6 pm Thursday 15 February 2024 **Barnard's Inn Hall**

Sustainable Energy in Refugee Camps

Sarah Rosenberg-Jansen

In partnership with the Independent Social Research Foundation.

Most of the world's 102 million forcibly displaced people – refugees – lack access to reliable, affordable, sustainable energy. Attempts to provide such energy in refugee camps have been marred by governance challenges, and a lack of technical expertise within humanitarian organisations. But new research discussed in this lecture on the lived experience of refugees is helping cast a light on ways to address it. However, developing inclusive approaches and supporting refugee-led action on energy is no easy task.



6 pm Monday 19 February 2024 **Barnard's Inn Hall**



6 pm Tuesday 20 February 2024 **Barnard's Inn Hall**

Health after Earthquakes, Volcanoes, Tsunamis

⊘gres.hm/earthquakes-volcanoes

Chris Whitty Visiting Professor of Public Health

Major geophysical events such as earthquakes, tsunamis and volcanoes can occur with little or no warning and have catastrophic effects. This lecture will consider the health impacts of these natural disasters and how best to minimise them. Trauma often dominates the first days after the initial event, but predicting the mediumterm effects such as infectious diseases can head off predictable secondary health disasters over the medium and long term.



6 pm Wednesday 21 February 2024 **Venue tbc** Pulsars, Microwave Ovens and the Radio Sky

∂gres.hm/radio-sky

Chris Lintott Gresham Professor of Astronomy

There have been two major revolutions in how we look at the sky – the shift beyond the optical to other wavelengths, particularly the radio, and the increasing attention paid to how objects change over time. We start with the discovery of pulsars by Jocelyn Bell Burnell, explore how a microwave oven bamboozled astronomers, and discuss the latest research on Fast Radio Bursts, mysterious events detected in galaxies billions of light-years away.



The Colour Spectrum of Scales and Modes

Milton Mermikides Gresham Professor of Music

A musical scale – a hierarchical collection of pitches spread over multiple octaves – is a fundamental building block in the creation of melodies and harmonies in a wide range of musical practices. But where do these scales come from? Are they invented or discovered? This lecture looks at the history, theory and artistry of scale construction in a wide range of styles, and how each scale can, through "rotation", form a colourfully expressive palette of modal colours. *Venue kindly subsidised by LSO.*

Option Pricing Theory Explained

¿gres.hm/option-pricing

Raghavendra Rau Mercers' School Memorial Professor of Business

We often change our minds after we decide to do something. In finance and business though, if you think you might like to change your mind you will have to pay your counterparty so that your right to change your mind is agreed in advance. But how much is the right to change your mind worth? Option pricing is the art of determining the value of this right.



6 pm Monday 26 February 2024 **Barnard's Inn Hall**

6 pm Thursday 22 February 2024 **LSO St Luke's**



1 pm Wednesday 28 February 2024 **Barnard's Inn Hall**

Changes in the Concept of Autism

⊘gres.hm/new-autism

Francesca Happé

Our understanding of autism has changed over the last 40 years. Historically, autism was diagnosed based on narrow criteria. Today, while still defined by social and communication difficulties, rigid interests and repetitive behaviours, the autism spectrum is far wider, and the historical under-diagnosis of women and girls is being addressed. "Autisms" are more often discussed as neurodivergence rather than a single "disorder" to be treated. This lecture explores how our understanding of autism has changed, and directions for future research.



6 pm Thursday 29 February 2024 **Barnard's Inn Hall**

Wealth Inequality: English Law's Unintended Legacy?

*∂*gres.hm/wealth-law

Leslie Thomas Gresham Professor of Law

Today, the UK is a deeply unequal society. This lecture critically evaluates the relationship between English law and capitalism and explores how legal changes over the past 30 years, such as deregulating the housing market and weakening trade unions, have widened wealth inequality. The lecture examines the role of lawyers in addressing these issues.

MARCH



The Mathematics of Coincidence

⊘gres.hm/maths-coincidence

1 pm Tuesday 5 March 2024 **Barnard's Inn Hall**

Sarah Hart Gresham Professor of Geometry

We regularly hear of amazing coincidences – people winning the lottery twice, or getting a phone call from a long-lost friend just when you were thinking about them. Is this telepathy? Is there a greater power at work when someone survives seven lightning strikes? There can be terrible consequences from the misunderstanding of coincidence.



Climate Tipping Points in Oceans, Ice, Forests

Myles Allen Frank Jackson Foundation Professor of the Environment

The impacts of climate change that probably worry people the most are irreversible changes that affect the entire world, such as a collapse of the west Antarctic ice sheet, shutdown of the global thermohaline circulation, loss of the Amazon biome or a melting of Arctic permafrost. Sudden, unpredictable and irreversible changes can happen in response to a gradual warming. What is known about these risks at 1.5°C, 2°C and higher levels of warming? 6 pm Tuesday 5 March 2024 **Barnard's Inn Hall**



6 pm Wednesday 6 March 2024 **Venue tbc**

Ritual Nudity in History and Religion

*⊘*gres.hm/ritual-nudity

Ronald Hutton Gresham Professor of Divinity

This lecture looks at the role played by nudity in European religion and magic from ancient times to the present, with some reference to a global context. It reveals the unexpected pattern and explains why it has been marginal to religion, except in initiation ceremonies, but very important in magical practices.



6 pm Thursday 7 March 2024 **Barnard's Inn Hall**

Ancient Greek Ideas of Equality Under the Law

*∂*gres.hm/greek-equality

Melissa Lane Gresham Professor of Rhetoric

The Nobel Laureate economist Amartya Sen has posed the question "equality of what?" The value of equality depends on what standard is chosen. As ancient Greek thinkers recognised, equality can be deployed to exclude as well as to liberate, and its relationship to law and freedom needs to be interrogated. If equal social freedom is a product of *isonomia* – the equal application of laws to all – those laws need to be free of systematic bias and command public respect.

Modern Concepts of ADHD

<mark>⊘gres.hm/adhd</mark>

Peter Hill

Attention-deficit hyperactivity disorder (ADHD) is a combination of hyperactivity, impulsiveness and inattention which significantly impacts those living with the condition. The medical approach to the ADHD pattern of behaviour has been very successful in childhood, but the results have been somewhat less impressive in adulthood. This has led to a reappraisal of both causes and treatment in both age groups. Should the conventional, neurotypical world accommodate people with ADHD as different, rather than disabled?



6 pm Monday 11 March 2024 **Barnard's Inn Hall**



Panel Discussion: New Hope in Cancer

⊘gres.hm/cancer-hope

Christina Messiou, James Larkin, Sanjay Popat, Parker Moss

In partnership with Novartis.

Treatments and research in cancer are moving very fast, giving new hope to many. This event will bring together speakers in the series to delve further into new treatments and research in cancer, including immunotherapy, genomics and Al imaging. 6 pm Tuesday 12 March 2024 **Barnard's Inn Hall**



6 pm Thursday 14 March 2024 **Barnard's Inn Hall**

Democracy: Ancient Models, Modern Challenges

⊘gres.hm/democracy-ancient

Melissa Lane Gresham Professor of Rhetoric

Dēmokratia is the power (kratos) of the people (dēmos). But what kind of power, and who constitutes the people? Although ancient democracy is often stylised as "direct democracy", and so positioned as very different from modern "representative democracy", in fact, issues of accountability are central to both. Ancient Greek models of holding leaders to account are still relevant. Furthermore, the ancient Greek use of election for some offices and lottery selection for others also offers instructive possibilities for today.



The Human Cost of Immigration Detention

Greg Constantine

In partnership with the Independent Social Research Foundation.

Governments increasingly use detention as a central component of immigration and asylum policy. The lecture addresses several important questions. What does immigration detention look like? How is it a reflection of those societies that tolerate its use and the policies that support and endorse its expansion? What place does it have in the journeys of those migrating across borders today? Using photography and testimony, this lecture visually translates several immigration detention systems and shares first-hand stories.

6 pm Monday 18 March 2024 **Barnard's Inn Hall**

Data Protection for Thrillseekers

⊘gres.hm/data-protection

Victoria Baines IT Livery Company Professor of Information Technology

We increasingly share with online services intimate details of our lives, such as mental health and reproductive data. Far from being a "tick box" legal exercise, data protection is about fair and responsible use of our personal information. It gives us rights which we are entitled to exercise against mega corporations, governments and anyone who processes our data. It's time to get empowered. Because if we don't use it, we might lose it.



6 pm Tuesday 19 March 2024 **Barnard's Inn Hall**



Artificial Selection: How Humans have Shaped Evolution

⊘gres.hm/human-led-evolution

Robin May Gresham Professor of Physic

We often think of evolution as "something that happened" in the past. But of course, evolution is a constant, powerful process and one that is often unleashed by human behaviours. Often this is deliberate. We'll look at how artificial selection has shaped our crops, livestock and domestic pets, and we'll find out how modern science is uncovering the genetic changes that lie beneath. But sometimes human behaviours unleash powerful and altogether less welcome evolutionary forces... join us as we uncover them together! 6 pm Wednesday 20 March 2024 **Barnard's Inn Hall**



6 pm Thursday 21 March 2024 **Barnard's Inn Hall**



Dominic Broomfield-McHugh Visiting Professor of Film and Theatre Music

The Black Welsh singer started out recording cover versions of American songbook classics, but rose to international fame after her performance of the title song of *Goldfinger*. Movie songs, successful albums and popular television specials followed, but so too did personal tragedy and a highly critical (and gendered) reputation of her professional behaviour in the media. The word "diva" has been applied both admiringly and misogynistically to her life and work, typifying her experience as a Black British woman.

Lead: A Toxic Legacy

⊘gres.hm/lead-health

lan Mudway Gresham Visiting Professor of Environmental Health

Evidence that childhood lead exposure caused stunted intelligence and behavioural problems motivated efforts to ban lead in petrol, with the world finally eradicating leaded fuel in 2021. This is a public health success story, but it took a long time to force industry to take action. The lead released from historic emissions persists within the environment and there is emerging evidence of continuing health effects. The legacy of lead remains, and will be explored in this lecture.



6 pm Monday 25 March 2024 **Barnard's Inn Hall**

APRIL



Import Substitution: A Failed Strategy for Growth?

Martin Daunton Visiting Professor of Economic History

In the Great Depression, producers of food and raw materials complained that they received low prices and paid high prices for industrial imports. Latin America adopted "import substituting industrialisation" to encourage production behind tariff barriers. This approach continued after the war as more countries gained independence. Did this policy result in inefficient industries and state regulation without delivering improved welfare? By the 1980s, the policy was in retreat with a turn to market liberalisation and export-led growth.

Is it Aliens? The Most Unusual Star in the Galaxy

⊘gres.hm/alien-star

Chris Lintott Gresham Professor of Astronomy

Boyajian's star, a faint and unprepossessing presence in the constellation of Cygnus, attracted astronomers' attention when it began to flicker alarmingly. We will discuss explanations for its behaviour, from disintegrating comets to alien megastructures, and consider how modern astronomy hunts for the truly unusual objects in the Universe. For this task, the involvement of large numbers of volunteers – citizen scientists – is essential, for example, via the Zooniverse platform, which invites you to participate in classifying galaxies and discovering planets 6 pm Tuesday 9 April 2024 **Barnard's Inn Hall**



6 pm Wednesday 10 April 2024 **Venue tbc**



6 pm Thursday 11 April 2024 **Barnard's Inn Hall**

Twentieth-Century Divas: Julie Andrews

*∂*gres.hm/andrews

Dominic Broomfield-McHugh Visiting Professor of Film and Theatre Music

Starring in *My Fair Lady* (1956), *The Sound* of *Music* (1965) and *Cinderella* (1957) gave Dame Julie Andrews unparalleled profile. These were among the most successful Broadway, Hollywood and TV musicals of their time. Yet following this golden decade, she made few films and appeared in no Broadway shows during her forties and fifties, typically an artist's most productive period. How did she then become one of the most revered female stars of the late twentieth century?



6 pm Tuesday 16 April 2024 **Barnard's Inn Hall**

The Geopolitical Risks of Climate Change

⊘gres.hm/climate-geopolitics

Myles Allen Frank Jackson Foundation Professor of the Environment

Climate change is predicted to spark increasing threats to food security and demands for climate reparations, fuelling geopolitical instability. Probably the greatest risk of all is tension over solar geo-engineering: the idea of reflecting away sunlight deliberately to modify global climate. Recognising solar geo-engineering as an inherently destabilising technology, because any such programme would inevitably be considered liable for bad weather everywhere, and ruling it out would be very helpful.

Refugees: English Law's Protection or Persecution?

*⊘*gres.hm/refugees-law

Leslie Thomas Gresham Professor of Law

How are refugees protected in English law? This lecture traces the history of refugee protection, the limits of the Refugee Convention, and changes to the law in recent decades that have made refugees' lives increasingly difficult. The Government's latest tranche of policies, the Nationality and Borders Act 2022 and the Rwanda offshoring scheme, are particularly brutal. Is it time to reverse anti-refugee policies and create safe and legal routes for refugees to reach the UK, without a number cap?

The Western Magical Tradition

⊘gres.hm/western-magic

Ronald Hutton Gresham Professor of Divinity

This lecture makes a survey of learned ceremonial magic in Europe throughout history and demonstrates that both of the customary claims made for it by practitioners since the Middle Ages are actually correct: that there is a continuous tradition of it and that it is ultimately derived from ancient Egypt. In doing so, it also shows what is distinctive about Western magic.

Musical Consonance and Dissonance

∂gres.hm/music-consonance

Milton Mermikides Gresham Professor of Music

What makes a piece of music challenging, bland, intriguing, beautiful or ugly? This lecture explores the concept of "musical flavour" formed by intervallic, rhythmic and timbral components and how they contribute to a sense of consonance and dissonance. In particular, we look at the interval vector. The "Hendrix chord" is used as a case study of such harmonic flavour.

Venue kindly subsidised by LSO.



6 pm Thursday 18 April 2024 **Barnard's Inn Hall**



6 pm Wednesday 24 April 2024 **Venue tbc**



6 pm Thursday 25 April 2024 **LSO St Luke's**



6 pm Tuesday 7 May 2024 **Barnard's Inn Hall**

ΜΑΥ

The Next Fifty Years of Tech

⊘gres.hm/future-tech

Victoria Baines IT Livery Company Professor of Information Technology

Come take a ride in the Tech Time Machine and explore how IT may change our lives in the next fifty years. By employing techniques used by science fiction writers, we can imagine how artificial intelligence, extended reality, mobile connectivity, quantum computing and others will develop. How will they converge, enable and accelerate each other? We can anticipate the opportunities and challenges technology may bring. Why should we fear disruption? Should we instead embrace it?



6 pm Wednesday 8 May 2024 **Barnard's Inn Hall**

Evolution Tomorrow and Beyond

Robin May Gresham Professor of Physic

Evolution has led from amoebae to blue whales and from algae to giant redwoods. So what might it do in the future? What species might evolve in the next ten million years? How will evolutionary processes change as a result of human innovation and what are the risks of us getting it disastrously wrong? What might evolution look like if we ever set up home on another planet, or if inhabitants of other planets arrive here?



How to Prove 1=0, and Other Maths Illusions

∂gres.hm/maths-illusions

Sarah Hart Gresham Professor of Geometry

In this lecture I will show you some mathematical illusions: "proofs" that 1=0, that fractions don't exist and more. There are curious and important implications behind what's going on. These "proofs" reveal some very common logical slips that can go unnoticed when we are trying to prove more plausible statements. And the stakes are high. As I'll show you, once you have "proved" one false claim, you can prove absolutely any statement at all.

Health after Extreme Cold, Heat, Storms and Floods

Chris Whitty Visiting Professor of Public Health

Weather and climate-related events can cause significant mortality and disability. Sudden cold, heat, storms and floods all present risks to health, especially to the most vulnerable. Even in countries with temperate climates like the UK, weatherrelated deaths can be in the thousands, for example, cold snaps causing cardiovascular deaths. In countries with more extreme weather, this can be much greater. Some can cause major social disruption. This lecture considers how weather events cause harm to health, and our countermeasures. 1 pm Tuesday 14 May 2024 **Barnard's Inn Hall**



6 pm Tuesday 14 May 2024 **Barnard's Inn Hall**



6 pm Thursday 16 May 2024 **LSO St Luke's**

Is Music Infinite?

∂gres.hm/music-infinite

Milton Mermikides Gresham Professor of Music

This lecture explores the very limits of music: investigating historical efforts to catalogue musical materials, including the *melakarta* of Carnatic music, the *wazn* of Arabic *maqam*, Slonimsky's *Thesaurus of Scales and Melodic Patterns*, Schillinger's *Encyclopedia of Rhythms* and Forte numbers, and contemporary attempts to "pre-copyright" every possible melody yet to be written. It also tackles the bigger questions: how much music might exist, whether it ever will be exhausted, and if there are any boundaries of our musical perception and imagination.

Venue kindly subsidised by LSO.

Asymmetric Information in Finance Explained

Raghavendra Rau

Mercers' School Memorial Professor of Business

In every financial transaction, one side has more information than the other. For example, when someone buys a used car, the seller will know better than the buyer whether the car is a plum or a lemon. Does more information leave you better off? One of the fascinating ideas behind the concept of asymmetric information is that more information can lead to you being actually worse off.



6 pm Monday 20 May 2024 **Barnard's Inn Hall**

A Just and Inclusive Net Zero: Who Should Get There First?

⊘gres.hm/inclusive-net-zero

Myles Allen Frank Jackson Foundation Professor of the Environment

Eventually, net zero needs to include everyone: for emissions to continue in half the world while the other half mops them up is both unsustainable and unfair. But this does not mean every country should reach net zero at the same time. Historical emitters like the UK should aim for net zero before the world as a whole, but a "staggered net zero" also carries risks for developing countries, lest they are left stranded in the race to a sustainable future.



6 pm Tuesday 21 May 2024 **Barnard's Inn Hall**



Logarithms: Mobile Phones, Modelling and Statistics

Oliver Johnson

In partnership with the London Mathematical Society.

Logarithms were perhaps once thought of as just an old-fashioned way to do sums on slide rules. But they underpin much of modern life, from modelling the COVID pandemic to Claude Shannon's mathematical theory of information (which makes mobile phones a reality) and making sense of Cristiano Ronaldo's crazy Instagram follower numbers. This lecture will explore the basics and history of logarithms, and then show how they are a natural way to represent many models and datasets. 6 pm Wednesday 22 May 2024 **Barnard's Inn Hall**



6 pm Thursday 23 May 2024 **Barnard's Inn Hall**

Race, Disability and Education: Law's Uphill Battle

⊘gres.hm/education-law

Leslie Thomas Gresham Professor of Law

This lecture traces the history of race and disability law in the English education system. It examines the impact of discriminatory policies on children of colour, and Black and disabled children, and how narratives around race and disability have changed. The lecture questions why inequality persists and explores possible solutions.



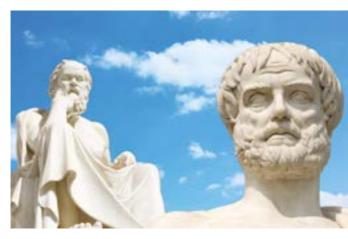
6 pm Wednesday 29 May 2024 **Venue tbc**

First Light: Revealing the Early Universe

∂gres.hm/first-light

Chris Lintott Gresham Professor of Astronomy

This lecture looks at how insight is derived from observations, considering the cosmic microwave background (CMB). The oldest light in the Universe, emitted just 400,000 years after the Big Bang, contains the seeds of the structures we see around us, and tells us about conditions at the Universe's beginning. It will also consider how measurements of the Universe's expansion, made using the CMB, are leading to unexpected results, creating tension in modern cosmology.



Experts in Politics: Lessons from Socrates and Aristotle

∂gres.hm/experts-politics

Melissa Lane Gresham Professor of Rhetoric

Socrates sought to test the expertise (*technē*) of everyone around him: the bombastic know-it-alls, the bashful youths, the confident generals, those with unsuspected mathematical competence, the workaday artisans. Aristotle later explored the ways in which expert claims can be made credible to popular judgement. This lecture considers the role of experts in contributing to public debate in a democracy. 6 pm Thursday 30 May 2024 **Barnard's Inn Hall**



1 pm Tuesday 4 June 2024 **Barnard's Inn Hall**



6 pm Wednesday 5 June 2024 **Venue tbc**

JUNE A Mathematician's View of Proof

⊘gres.hm/mathematician-proof

Sarah Hart Gresham Professor of Geometry

The idea of proof is fundamental to mathematics. We could argue that science consists of testable theories, and therefore that it is about what can be disproved, not what can be proved. In law, the test is "beyond reasonable doubt". Famous conjectures in mathematics have been tested by computers for trillions of numbers – but we still call them conjectures. In this lecture we'll talk about what mathematicians mean by proof, and I'll show you some of my favourites.

Witch-Hunting in European and World History

∂gres.hm/witches-europe

Ronald Hutton Gresham Professor of Divinity

This lecture confronts the worldwide phenomenon of the persecution of suspected witches, now a serious, contemporary problem condemned by the UN in 2021. It will show what has been unusual about Europe in this global pattern, and why the notorious early modern witch hunts there commenced and ended.



Are Financial Markets Efficient?

⊘gres.hm/market-efficiency

Raghavendra Rau Mercers' School Memorial Professor of Business

One of the crucial ideas in finance is that markets are efficient – that they fully reflect all available information. If so, what about market bubbles? Over the last year, people have been willing to pay exorbitant amounts for extremely odd assets such as Non-Fungible Tokens, meme stocks, etc. Why do they do this? This lecture will explore some investors' systematic behavioural biases, and how these can be used to predict returns. 6 pm Monday 10 June 2024 Barnard's Inn Hall

Plato's Cave: Thinking about Climate Change

⊘gres.hm/platos-cave

Melissa Lane Gresham Professor of Rhetoric

In *The Republic*, Plato explores the predicament of the Cave: a passive citizen body, a conniving and self-interested set of sophistic opinion-formers and demagogic political leaders; a systematically misleading and damaging order of political structures and common beliefs and appetites. Does this have lessons for tackling climate change? In clinging to our current way of life and its fossil-fuel infrastructure, are we trapping ourselves in a modern version of Plato's Cave – and if so, how might we escape?



6 pm Thursday 13 June 2024 **Barnard's Inn Hall**



6 pm Monday 17 June 2024 **Barnard's Inn Hall**

The Gray's Inn Reading 2024

∂gres.hm/grays-inn-24

In partnership with the Honourable Society of Gray's Inn.

An annual lecture delivered by Britain's leading legal professionals. Speaker to be announced. Further information will be available on our website soon.



6 pm Wednesday 19 June 2024 **Barnard's Inn Hall** Provost's Lecture agres.hm/provost-24

Martin Elliott

An annual lecture delivered by the Provost of Gresham College. Further information will be available on our website soon.

6pm Thursday 20 June 2024 **Venue tbc**

The Annual Sir Thomas Gresham Lecture 2024

*⊘*gres.hm/thomas-gresham-24

Details tbc

This key lecture will take place this month; further information will be available on our website soon.