



The Science of Beauty

Tuesday 10 – Wednesday 11 November 2015

**at The Royal Society of Edinburgh (RSE)
22–26 George Street, Edinburgh, EH2 2PQ**

**Organised by
Sir Michael Atiyah, University of Edinburgh
Professor Semir Zeki, University College London**

**Local Organising Committee
Professor Richard Morris, University of Edinburgh
Professor Andrew Ranicki, University of Edinburgh**

What is common to the experience of beauty derived from sensory sources such as music and visual art, highly cognitive ones such as mathematics and from moral sources? What is the relationship between aesthetic judgment and aesthetic experience? And what is the grander biological significance of the experience of beauty?

These are the deep questions that will be discussed at length by the many distinguished speakers at this two-day conference, drawn from the fields of mathematics, physics, philosophy and neuroscience.

Full programme is printed overleaf

To register please go to our website

www.royalsoced.org.uk

or contact the RSE Events Department:
email: events@royalsoced.org.uk
tel: 0131 240 2780

Full rate: £40 Student rate*: £10

This charge includes lunch, refreshments and free entry to the concert

**** Limited places available***

Programme

Tuesday 10 November

08.30 **Registration**

08.55 **Welcome and Chair**

Dame Jocelyn Bell Burnell, President, Royal Society of Edinburgh

09.00 ***The Role of Beauty in Mathematics***

Sir Michael Atiyah, University of Edinburgh

09.45 ***Beauty in Physics and Mathematics***

Professor Robbert Dijkgraaf, Director and Leon Levy Professor, Institute for Advanced Study, Princeton

10.30 **Tea and Coffee**

11.00 ***The Perception of Human Beauty***

Professor Beatrice de Gelder, Maastricht University

11.45 ***Beauty and Excellence in Scottish Philosophical Aesthetics***

Professor Gordon Graham, Director of The Center for the Study of Scottish Philosophy,
Princeton Theological Seminary

12.30 **Lunch**

Chairperson: Professor Andrew Ranicki

Professor of Algebraic Surgery, University of Edinburgh

14.30 ***Philosophical Approaches to Beauty in Mathematics***

Dr Angela Breitenbach, Cambridge University

15.15 ***Literature and Empirical Aesthetics***

Professor Winfried Menninghaus, Director, Max Planck Institute for Empirical Aesthetics, Frankfurt

16.00 **Tea and Coffee**

Chairperson: Professor Semir Zeki

University College London

17.00 ***Beauty in the Animal World***

Sir David Attenborough

Wednesday 11 November

08.45 **Registration**

Chairperson: Professor Richard Morris
Professor of Neuroscience, University of Edinburgh

09.00 ***Neural Correlates of the Experience of Beauty, Including Mathematical Beauty***
Professor Semir Zeki, University College London

09.45 ***The Neurobiology of Aesthetic Judgments***
Dr Tomohiro Ishizu, University College London

10.30 **Tea and Coffee**

11.00 ***The Neurobiology of Beauty, as Related to Symmetry***
Dr Cinzia Di Dio, University Cattolica Milan

11.45 ***The Beauty of Tears and the Tears of Beauty: Neurobiology of Sorrow***
Professor Michael Trimble, Institute of Neurology, University College London

12.30 **Lunch**

14.30 ***Conversation Without Words***
Professor Nicky Clayton, Cambridge University and **Mr Clive Wilkins**, Artist in Residence, Cambridge University

15.15 **Tea and Coffee**

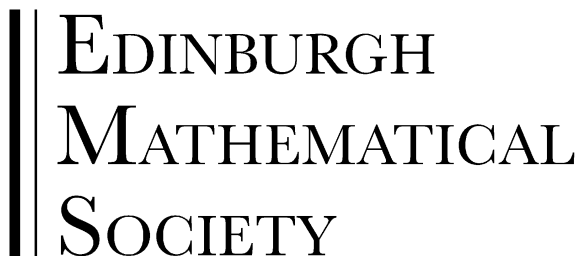
Chairperson: Sir Michael Atiyah
University of Edinburgh

16.30 ***The Role of Art in Mathematics***
Sir Roger Penrose

18.30 ***Going to Ground: Musical Magic From Pervasive Patterns***
A concert by Musicke in the Ayre
Oscar Garcia-Prada countertenor
Din Ghani lutes
at St Andrew's and St George's Church

We are grateful for the support of Wellcome Trust; Binks Trust; London Mathematical Society; Google DeepMind; Brain; University College London; Edinburgh Mathematical Society; and The School of Mathematics, University of Edinburgh

wellcometrust



THE UNIVERSITY *of* EDINBURGH
School of Mathematics

Guidance for visitors to the RSE: The RSE provides facilities and services for disabled visitors. Please visit the RSE web site or contact the events department for details. For details on accommodation please contact the RSE or visit our web site.