

10th C. K. Majumdar Memorial Lecture

C. K. Majumdar Memorial Lecture

The C K Majumdar Memorial Lectures are organized by the Satyendra Nath Bose National Centre for Basic Sciences, Kolkata as a tribute to Late Professor Chanchal Kumar Majumdar, the Founder-Director of the Centre

Past Speakers

N Mukunda	<i>Geometric Phases for Two- and Three-Level Quantum Systems</i>	11 August 2001
B Sriram Shastry	<i>Dynamical Symmetries, Accidental Degeneracies and Transport in Many Body Systems</i>	1 January 2003
Sudhanshu S Jha	<i>Superconductivity in Solids: Misconceptions and Realities</i>	12 August 2003
Guruswamy Rajasekaran	<i>Recent Discoveries in Neutrino Physics</i>	11 August 2004
Jainendra K. Jain	<i>A new class of Fermions in Physics</i>	2 August 2005
David Logan	<i>Optics and transport in heavy electron materials: theory meets experiment</i>	11 December 2006
R Ramesh	<i>Whither Oxide Electronics?</i>	4 January 2008
Peter B Littlewood	<i>New condensates of matter and light</i>	5 January 2009
Professor D Khomskii	<i>Main problems and current challenges in with strongly correlated electrons</i>	1 February 2011



Title
Making Light of Mathematics

Speaker
Professor Sir Michael Berry
Melville Wills Professor of Physics (Emeritus)
University of Bristol, UK

Friday, 9 March 2012 at 4.00 pm

Venue
Silver Jubilee Hall, S.N Bose National Centre for
Basic Sciences, Kolkata



विज्ञानेन परिपश्यन्ति धीराः

About the speaker



Sir Michael Berry is a mathematical physicist at the University of Bristol, England.

He was elected a fellow of the Royal Society of London in 1982 and knighted in 1996. From 2006 he has been Editor of the journal, *Proceedings of the Royal Society*. He is famous among other things for the Berry phase, a phenomenon observed e.g. in quantum mechanics and optics. He specializes in semi-classical physics (asymptotic physics, quantum chaos), applied to wave phenomena in quantum mechanics and other areas such as optics.

Berry has a BSc in physics from the University of Exeter and a PhD from the University of St. Andrews. Since then, he has spent his whole career at the University of Bristol: Research Fellow, 1965-7; Lecturer, 1967-74; Reader, 1974-78; Professor of Physics, 1978-88; Royal Society Research Professor since 1988.

Abstract

Many 'mathematical phenomena' find application and sometimes spectacular physical illustration in the physics of light. Concepts such as fractals, catastrophe theory, knots, infinity, zero, and even when $1+1$ fails to equal 2, are needed to understand rainbows, twinkling starlight, sparkling seas, oriental magic mirrors, and simple observations on interference, polarization and focusing. The lecture is intellectual but nontechnical, and strongly visual.

S.N Bose National Centre for Basic Sciences

Block JD, Sector III, Salt Lake,
Kolkata- 700 098

On behalf of the Centre

I cordially invite you to the

10th

C.K Majumdar Memorial Lecture

to be delivered by

Professor Sir Michael Berry

*Melville Wills Professor of Physics (Emeritus),
University of Bristol, UK*

on

MAKING LIGHT OF MATHEMATICS

at the

Silver Jubilee Hall, S.N Bose National Centre for
Basic Sciences, Kolkata

on

Friday, 9 March 2012 at 4.00 pm

Arup K Raychaudhuri
Director