





The Unknown Maxwell

Cambridge Philosophical Society One-day meeting 28 March 2025

Cambridge University Engineering Department, Trumpington St Lectures and exhibition: Constance Tipper Lecture Theatre Refreshments: LR4

09.00	Welcome, introduction	Dr Claire Barlow
Session 1	Chair: Dr Claire Barlow	
09.15	The Unknown Maxwell	Professor Bruce Hunt (University of Texas)
10.00	The Mechanical Origins of Maxwell's Equations	Professor Malcolm Longair (Cavendish)
10.45-11.00	Introduction to Maxwell artefacts on display in Constance Tipper lecture Theatre	Professor Isobel Falconer (University of St Andrews)
11.00	Tea/coffee in LR4	
Session 2	Chair: Professor Isobel Falconer	
11.30	Maxwell and the nature of primary colours	Professor John Mollon (Psychology)
12.15	From Maxwell's fields to quantised light	Professor Peter Knight (Imperial College)
13.00-14.00	Lunch (own arrangements) Canteen on 2 nd floor is open for sandwiches, tea/coffee and cakes	
Session 3	Chair: Professor Gordon Ogilvie	
14.00	Maxwell and the Geometry of Structural Equilibrium	Professor Bill Baker (Cambridge University Honorary Professor of Structural Engineering), Professor Allan McRobie (Engineering)
14.45	150 years of cybernetics: from Maxwell's governor to neuromorphic machines	Professor Rodolphe Sepulchre (Engineering)
15.30	Tea/coffee in LR4	
Session 4	Chair: Professor Rodolphe Sepulchre	
16.00	Saturn's rings, gravitational instability and the formation of planets	Professor Gordon Ogilvie (DAMTP)

	16.45	Thermodynamics and Maxwell's Demon Demystified	Professor John Ellis (Cavendish)
	17.30	Closing remarks	Dr Claire Barlow