

# THE 183<sup>RD</sup> NOBEL SYMPOSIUM

## PHYSICS OUTREACH PROGRAMME 2022

18 October to 02 November  
Republic of South Africa

Timetable

DATE	TIME	SPEAKER	VENUE	LECTURE TITLE
18 Oct	17h00-18h30	Yin-Zhe Ma/UKZN	UWC	Cosmology: A golden era
20 Oct	13h00-14h00	Viatcheslav Mukhanov/LMU, Munich	UCT	The quantum universe
20 Oct	18h00-19h30	Erik Aurell/KTH	SU	The mystery of black hole entropy
21 Oct	16h30-19h00	Thifhelimbilu Daphney Bucher/CPUT	NMU	Rise and take your position
		Neil Turok		Universe (virtual)
21 Oct	11h00	Francesco Petruccione/SU	AIMS	Entanglement: From theory to quantum computers
24 Oct	16h30-18h00	Sir Michael Berry/Bristol	SU	How quantum physics democratised music: a meditation on physics and technology
31 Oct	13h00-14h30	Neil Turok/Edinburgh	UKZN	Universe (virtual)
		Armita Nourmohammad/Washington		Learning the shape of the protein universe
31 Oct	18h00-19h50	Mogens H. Jensen/Copenhagen	UKZN	Complexity in science
		Angelo Vulpiani/Rome		Predicting the future: an old problem from a modern perspective
01 Nov	10h00-12h00	Erik Aurell/KTH	Wits	Fluctuation relations
		Luca Gammaitoni/NiPS Lab, Perugia		Why it is difficult to find something if you do not know what you are looking for
02 Nov	16h00-17h00	Armita Nourmohammad/Washington	Wits	Learning the shape of the immune and protein universe

Speakers



**Professor Yin-Zhe Ma**

Full Professor of Astrophysics, University of KwaZulu-Natal, South Africa  
Member of Academy of Science of South Africa



**Professor Viatcheslav Mukhanov**

Full Professor of Physics  
Head of the Astroparticle Division at the Ludwig-Maximilians-Universität, Munich, Germany.



**Professor Erik Aurell**

Professor of Theoretical Biological Physics at Royal Institute of Technology at Stockholm (KTH).



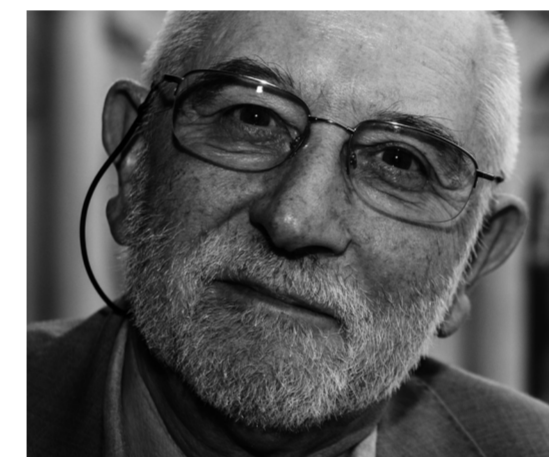
**Doctor Thifhelimbilu Daphney Bucher**

Lecturer and Researcher at Cape Peninsula University of Technology



**Professor Francesco Petruccione**

Professor of Quantum Computing, School of Data Science and Computational Thinking, Stellenbosch University  
Interim Director National Institute for Theoretical and Computational Sciences (NITheCS)



**Professor Michael Berry**

Melville Wills Professor of Physics (Emeritus) at Bristol University



**Professor Neil Turok**

Inaugural Higgs Chair of Theoretical Physics, the University of Edinburgh  
Director Emeritus and Distinguished Visiting Research Chair, Perimeter Institute



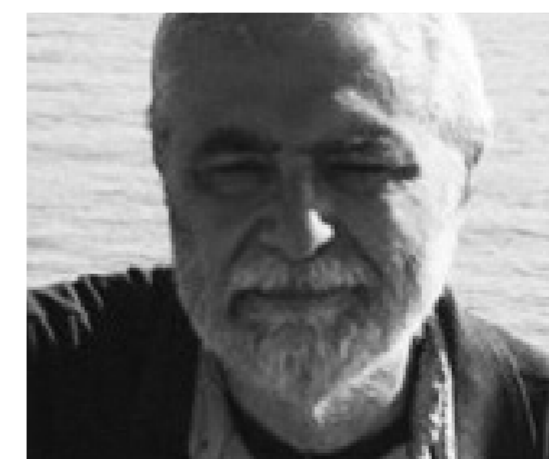
**Professor Armita Nourmohammad**

Assistant Professor of Physics at the University of Washington  
Affiliate investigator, Fred Hutchinson Cancer Research Center, Seattle



**Professor Mogens H. Jensen**

Professor of Complex Systems and Biophysics, Niels Bohr Institute, University of Copenhagen  
President of Royal Danish Academy of Science and Letters (until 2020)



**Professor Angelo Vulpiani**

Full Professor, University of Rome



**Professor Luca Gammaitoni**

Director of the Noise in Physical System Laboratory (NiPS Lab) at the Physics Department of the Università di Perugia, Italy.

