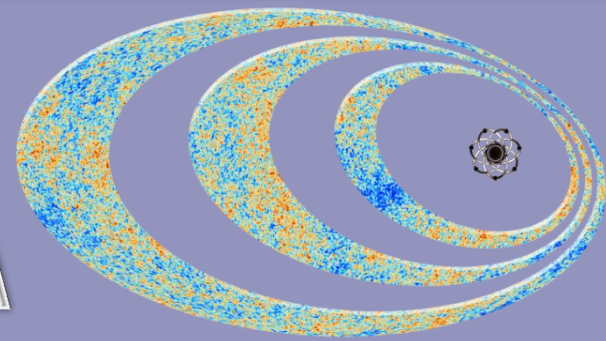


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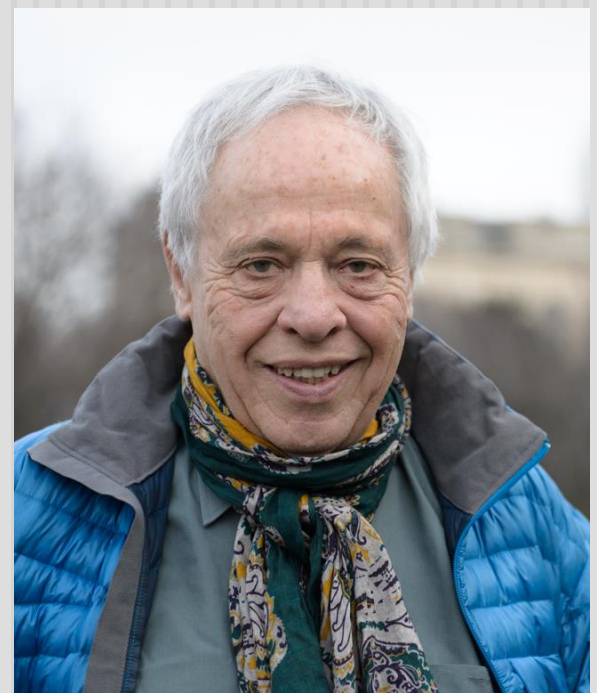
The Limits of Cosmology

Prof. Joe Silk

IAP (Paris), John Hopkins University and the University of Oxford

Abstract: One of our greatest challenges in cosmology is understanding the origin of the structure of the universe, and in particular the formation of the galaxies. I will describe how the fossil radiation from the beginning of the universe, the cosmic microwave background, has provided a window for probing the initial conditions from which structure evolved and seeded the formation of the galaxies, and the outstanding issues that remain to be resolved. I will address our optimal choice of future strategy in order to make further progress on understanding our cosmic origins.

About the speaker: Joseph Silk is Homewood Professor of Physics and Astronomy at the Johns Hopkins University in Baltimore and a researcher at Institut d'Astrophysique de Paris in France. He is also a Senior Fellow at the Beecroft Institute for Particle Astrophysics and Cosmology at the University of Oxford. He is a Fellow of the Royal Society and a member of the National Academy of Sciences and the American Academy of Arts and Sciences. Silk has received many awards, including the Gold Medal of the Royal Astronomical Society. He has published more than 700 articles and several popular books. Most of his scientific research is related to cosmology and particle astrophysics. His specialties include the cosmic microwave background, the fossil radiation from the beginning of the universe; formation of the galaxies; and exploration of the nature of the dark matter that is the dominant form of matter in the universe. He discovered the Silk damping mass, a key component of the Big Bang theory of modern cosmology, and his predictions of the associated damping of cosmic microwave background radiation fluctuations have been verified by several recent experiments.



Venue: S.N. Bose Hall (HSB210)

Date: Wednesday April 11th, 2018

Time: 5:00-6:00 PM

Tea and cake at 4:45 PM



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