



FRANCE – HONG KONG
DISTINGUISHED
LECTURE SERIES

History of the Universe

by
Professor Françoise Combes

President of the French Academy of Sciences
Member of the Academia Europaea
Member of the National Academy of Sciences, USA
L'Oréal-UNESCO Women in Sciences Award
Emeritus Professor at Collège de France



*A series of high-profile lectures
under the auspices of
the French Academy of Sciences*

Abstract:

Since Einstein's discovery of General Relativity at the beginning of the 20th century, we know that the Universe cannot be static. Space must expand or contract. The observations show that the galaxies are all moving away from each other with a speed proportional to their distance, this is the Hubble-Lemaitre relation. Converging observations have strongly confirmed the "Big Bang" theory, where the Universe begins in an extremely hot and concentrated state: the primordial nucleosynthesis of light elements like helium or deuterium, detection of the cosmic microwave background, as a black body at 2.73 Kelvin, the discovery of small density fluctuations in this microwave background, 400,000 years after the Big Bang, which then give birth to galaxies. Since 1998 we know that the expansion of the Universe is accelerating, due to a mysterious dark energy.

According to inflation, the most successful theory today, all large structures of the Universe come from quantum fluctuations of the vacuum.

Date: 16 October 2025 (Thursday)
Time: 4:30 pm
Venue: Senate Room, 19/F
Lau Ming Wai Academic Building
City University of Hong Kong
Enquiries: Miss Cherry Lau
Tel: 3442 9409
Fax: 3442 0252
Email: vpre@cityu.edu.hk



Online registration:
<https://forms.office.com/r/LqGrJSPw5M>

All are Welcome