







FROM MARS TO THE MULTIUERSE

Astronomers have made astonishing progress in tracing cosmic history from some mysterious "beginning" nearly 14 billion years ago, and probing the emergence of atoms, galaxies, stars and planets. Spacecrafts have visited other planets and moons of our Solar System, beaming back pictures of varied and distinctive worlds. The recent realisation that many other stars are orbited by planets – some resembling our Earth – is exciting. Could there be life on some of them?

Looking further afield, we are understanding galaxies and their nuclei in fuller detail, and can study their evolution by detecting objects all the way back to the time of galaxy formation. We can further trace pre-galactic history with some confidence back to a nanosecond after the "big bang" and even less in particular with ESA's Planck spacecraft. These advances pose new questions: What does the long-range future hold? Is physical reality even more extensive than what our telescopes can probe? Was "our" big bang the only one? This illustrated lecture will address such issues and outline how future instruments will yield further advances.

LORD MARTIN REES

Martin Rees is a Fellow of Trinity College and Emeritus Professor of Cosmology and Astrophysics at the University of Cambridge. He holds the honorary title of Astronomer Royal and also Visiting Professor at Imperial College London and at Leicester University. He served for ten years as director of Cambridge's Institute of Astronomy and he was a Royal Society Professor from 1992 to 2003. In 2005, he was appointed to the House of Lords and he was President of the Royal Society between 2005 and 2010. He is the author or co-author of more than 500 research papers on astrophysics and cosmology, as well as eight books (six for general readership), and many magazine and newspaper articles. His numerous awards include the Balzan Prize (1989), the Albert Einstein World Award of Science (2003) and the Crafoord Prize (2005).

This unique conference is given for the Diplomatic Club of Geneva. It is open to the participants of the European Week of Astronomy and Space Science (EWASS 2014) held in Geneva from June 30^{th} to July 4^{th} , 2014. The academic community of the University of Geneva and CERN is also welcome.

The lecture will be preceded by an allocution by the President of the Diplomatic Club, Luzius Wasescha, and by Prof. Thierry Courvoisier, President of the European Astronomical Society and of the Swiss Academy of Sciences. A cocktail will be served at the end of the event.