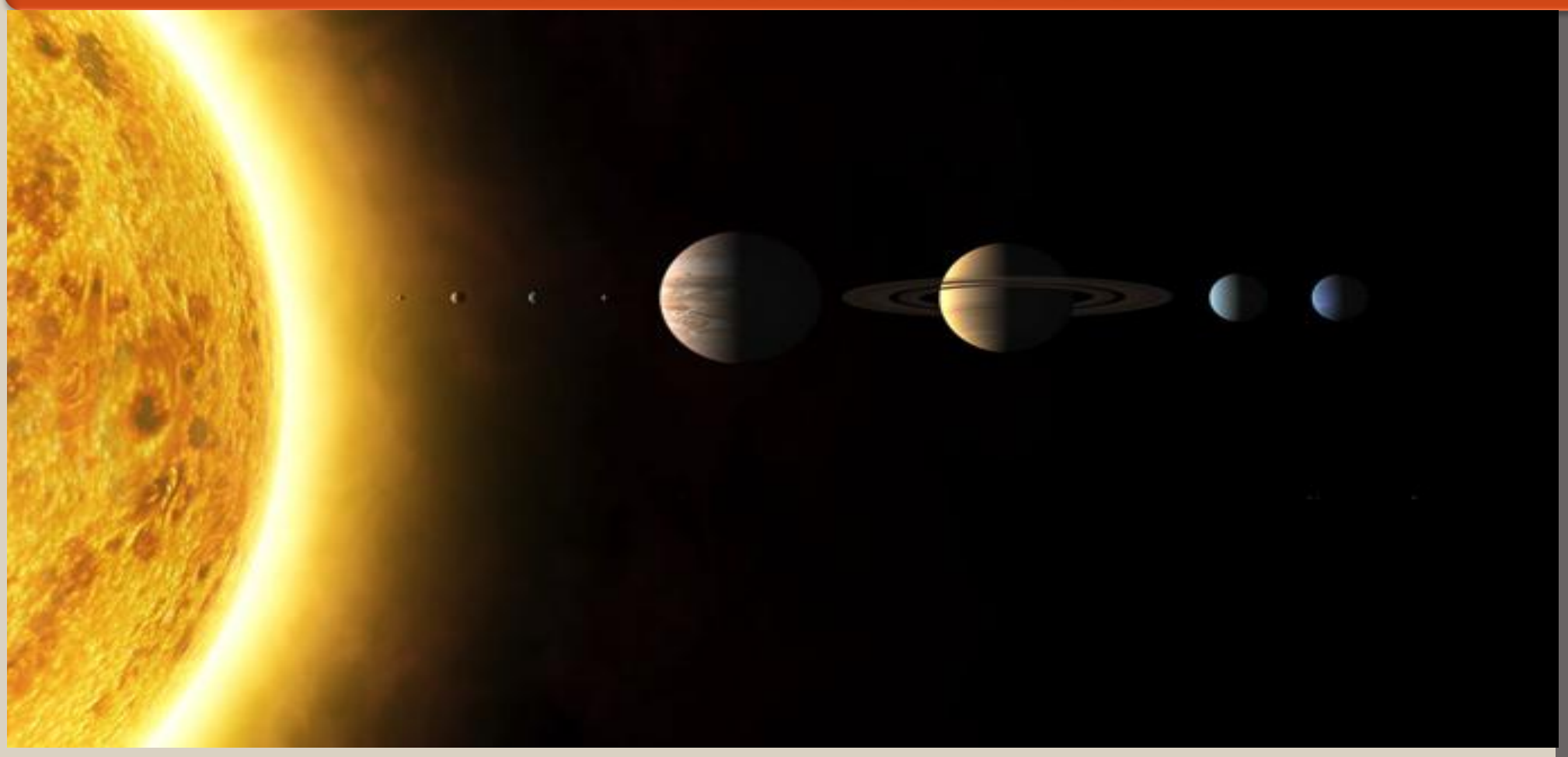
Tata Institute of Fundamental Research

12th Homi Bhabha Public Lecture

How old is the Sun?



Douglas Gough, *Fellow of the Royal Society, a distinguished British Astronomer, is Professor Emeritus of Theoretical Astrophysics of the University of Cambridge, and Leverhulme Emeritus Fellow. He has been awarded the Hale Prize of the American Astronomical Society, the Gold Medal and the Eddington Medal of the Royal Astronomical Society.*

The Sun is a star: an enormous ball of hot gas. It once condensed from a vast turbulent diffuse cloud composed mainly of the original building blocks of the Universe - Hydrogen and Helium - with a smattering of all the other material of which we, and our Earth, are composed. Around it formed the planets. Eventually the Sun settled down into a more-or-less quiescent state, at least deep inside, where the temperature and pressure are extremely high. There, a fire is now smoldering gently, burning Hydrogen into yet more Helium, and supplying the heat that makes the Sun shine. A fundamental question of great importance to our understanding of the lives of the stars and their companion planets is whether the planets were formed at the same time as the host star or whether they were created later. To answer this, we need to determine the ages of each. In the case of our solar system, we believe that we know the ages of the planets from their radioactivity. But the Sun is more enigmatic. The lecture will focus on our quest to determine its age, in order to find the answer to this fundamental question.

Tuesday - December 8, 2015 at 5 p.m.

Homi Bhabha Auditorium, TIFR

1-Homi Bhabha Road, Colaba, Mumbai 400005

For details:
22782500, 22782235, 22782089
Email: pro@tifr.res.in

Talk is open to all.
Non TIFR members are requested to carry valid photo ID card in person.