

## **Colloquium**

### **Climate change: at the intersection of the natural sciences**

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The Earth's climate is an emergent property of a complex set of interactions among the land, ocean and atmosphere, and which is also shaped by the presence of life. Humans have embarked on inadvertent large scale climate engineering experiments since the industrial revolution, provoking significant shifts in the Earth's climate that are now imprinted onto the planetary geological record.

I will discuss (inferred) past, (observed) present, and (modelled) future climate change and the mechanism of attribution. I will discuss the basic principles of Earth system models and some of the open questions in the field that pertain to each of physics, chemistry and biology. The hope is that members at the Institute may find it possible to map such problems to their expertise.

***Tuesday, Sep 26<sup>th</sup> 2017***

***04:00 PM (Tea/Coffee at 03:45 PM)***

***Auditorium, TIFR-H (FReT-B)***