

The Institute of Mathematical Sciences, Chennai



Quarterly Report

October - December 2021



2. Lecture on The Nobel Prize in Physics 2021 : Physics of complex systems: disordered materials and the earth's climate

Speaker: **Prof. Pinaki Chaudhuri and Prof. R. Shankar** The Institute of Mathematical Sciences (IMSc), Chennai, India

Date: 8 November 2021, 16:00 hrs - 17:00 hrs

Abstract: The 2021 Nobel Prize for Physics was awarded “for groundbreaking contributions to our understanding of complex systems”. One half of the prize is awarded to Giorgio Parisi, for discovering hidden patterns in disordered complex materials. This first half of this talk will discuss these findings and how they have permeated to understand other physical problems and phenomena in other scientific domains. The other half of the prize is shared by Syukuro Manabe and Klaus Hasselmann for their contributions to the physics of climate science, a specific complex system, in another scientific domain, namely the Earth’s climate. A specific complex system, in another scientific domain, namely the Earth’s climate. The second part of the talk will outline the historical evolution of ideas and discoveries in climate physics and attempt to describe the significance of their contributions in this context.

Video Link : <https://youtu.be/TS-lIcJzJrc>

The Nobel Prize in Physics 2021

Physics of the earth's climate:
Contributions of Manabe and Hasselmann.
R. Shankar
Retired from The Institute of Mathematical Sciences
IMSc Public Lecture Series, 8th November, 2021

IMSc Popular Lecture
Physics of Complex systems;
Disordered materials and the Earth's climate
Prof. Pinaki Chaudhuri (IMSc) &
Prof. R. Shankar (rtd. IMSc)
8 November 2021

The Nobel Prize in Physics 2021

Name	Prize share
Syukuro Manabe	1/4
Klaus Hasselmann	1/4
Giorgio Parisi	1/2