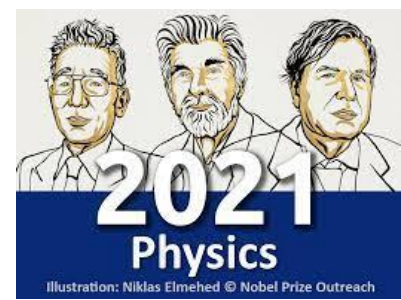
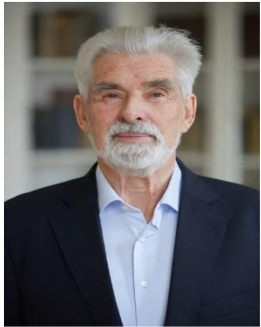


MCE PHYSICS

Tuesday, November 30th 2021



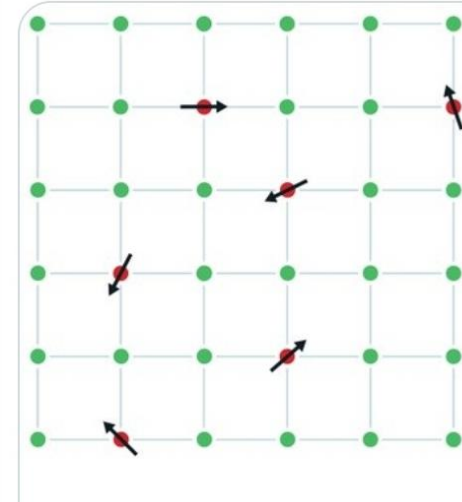
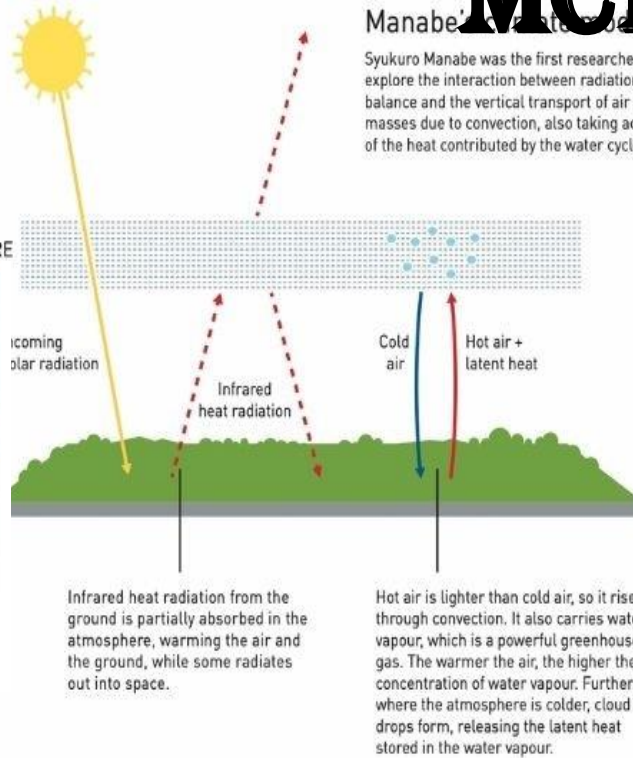
Nobel Prize winners in Physics



© Nobel Prize Outreach. Photo: Risdon Photography
Syukuro Manabe
 Prize share: 1/4

© Nobel Prize Outreach. Photo: Bernhard Ludewig
Klaus Hasselmann
 Prize share: 1/4

© Nobel Prize Outreach. Photo: Laura Sbarbori
Giorgio Parisi
 Prize share: 1/2



Spin glass

A spin glass is a metal alloy where iron atoms, for example, are randomly mixed into a grid of copper atoms. Each iron atom behaves like a small magnet, or spin, which is affected by the other magnets around it. However, in a spin glass they are frustrated and have difficulty choosing which direction to point. Using his studies of spin glass, Parisi developed a theory of disordered and random phenomena that covers many other complex systems.

- Iron
- Copper

The Nobel Prize in Physics 2021 was awarded "for groundbreaking contributions to our understanding of complex physical systems" with one half jointly to Syukuro Manabe and Klaus Hasselmann "for the physical modelling of Earth's climate, quantifying variability and reliably predicting global warming" and the other half to Giorgio Parisi "for the discovery of the interplay of disorder and fluctuations in physical systems from atomic to planetary scales".

Department of Physics

Malnad College of Engineering, Hassan – 573 202