



JAMES R. NEFF PUBLIC LECTURE

ANDERS CARLSSON

PROFESSOR OF PHYSICS
WASHINGTON UNIVERSITY IN ST. LOUIS

ENERGY STORAGE - THE KEY TO A COMPLETELY RENEWABLE ENERGY SYSTEM

Renewable energy sources are a growing fraction of our energy supply, but they are strongly intermittent. Therefore using renewable energy efficiently requires a large storage capacity. The talk will explain the “how-to” of some key energy-storage technologies including batteries, capacitors, and pumped hydropower. It will then describe current limits on the technologies, and point to promising directions for the future, such as underground thermal energy storage.

TUESDAY, OCTOBER 19 | 4:30 PM
CARDWELL HALL 103

Refreshments to be served at 4 pm in Cardwell 119

Anders Carlsson joined WUSTL Physics in 1983. After receiving his Ph. D. in Physics from Harvard and a postdoc at Cornell, he performed research in several areas of condensed matter theory. His recent research has been in biological physics and mechanobiology.

He is currently working on understanding the function and control of the protein actin in biological cells, which is crucial for cell shape changes and migration.

He was Jubilee Professor at the Chalmers University of Technology in Gothenburg in 2001, spent the fall of 2008 as a visitor at the Max Planck Institute for the Physics of Complex Systems in Dresden, and organized the program “Generation and Control of Forces” at NORDITA, Stockholm in 2018.

Department of Physics

KANSAS STATE
UNIVERSITY