



UNIVERSITY OF SOUTHERN DENMARK

Wizardry with Light

Lene Vestergaard Hau, the world-famous Danish physicist who stopped light, will be delivering this year's Hans Christian Andersen lecture at the University of Southern Denmark.

Nothing we know moves as fast as light.

It moves at a speed of 300,000 kilometres per second, so that it takes only eight seconds for a pulse of light from the sun to reach earth.

But light can be stopped. This is what professor Lene Vestergaard Hau has demonstrated in a series of ground-breaking experiments. She became world-famous when, in 1999, she managed to reduce the speed of a beam of light to such a point that it was moving at only 17 metres per second. Later she showed that light can be stopped completely and be recreated at will.

The Danish physicist, who has worked in USA for the past 25 years, will give this year's HCA lecture at the University of Southern Denmark.

She will be coming to Odense on 9th October, where she will talk about her research in a lecture entitled 'Wizardry with Light'.

The lecture has been organised by The Hans Christian Andersen Academy at SDU, which annually invites a researcher of outstanding international status to deliver the Hans Christian Andersen lecture.

Extreme conditions of cold

At Harvard University, Lene Vestergaard Hau has her own research team, and their experiments take place under conditions of extreme cold – close to absolute zero at minus 273.15 degrees, where atoms and molecules become completely immobile. Her most recent research involves combining ultracold atoms with nanotechnology in order to shed light on aspects of the laws of nature that are still shrouded in mystery.

When Lene Vestergaard Hau received the Carlsberg Foundation Research Prize, it was emphasized that her work is characterised by an immense creativity and that in every single experiment she manages to focus on aspects of basic research and on potential applications.

[Lene Vestergaard Hau - CV.](#)

