

LIT LECTURES

10 JANUARY 2018, 12:00-13:30, FESTSAAL A JKU

Thinking cars, subways on computer chips, atoms' fingerprints – if you want to know, what JKU research is all about, you are cordially invited to join the LIT Lecture Series!

Get a glimpse of the hottest research topics, think out of the box with interdisciplinary projects and get in contact with other excellent researchers.

The next three topics are presented on 10 January 2018!

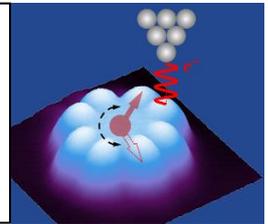
Finger food provided.

Please register latest by 3 January https://www.reglist24.com/lit_lecture_2018.

“Single atom radio frequency fingerprinting”

Stefan Müllegger (LIT / Institute of Semiconductor and Solid State Physics)

Modern nanoscience approaches the atomic scale: Individual atoms, rather than ensembles, carry the functionalities of man-made devices (switching, storing, calculating, catalyzing, etc). While single-atom imaging is routine since the advent of the scanning tunneling microscope (STM) in the '80s, their chemical identification is difficult. I develop a “6th sense” that turns the STM from an imaging- to an identification tool with atomic resolution.



“Neuroenhancement in everyday life”

Nicole Kronberger (LIT / Institute of Education and Psychology)

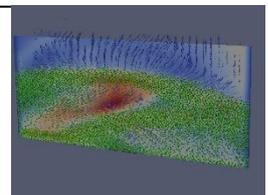


Public reactions to new technologies can occur in forms not foreseen by developers and experts. In this LIT project we address public views of medical and technological developments commonly summarized under the umbrella term “neuroenhancement”. The project will add insights on how societally robust innovation can be promoted in modern societies.

“Recurring patterns in gas-solid flows”

Thomas Lichtenegger (LIT / Department of Particulate Flow Modelling)

Detailed simulations of multiphase flows are very time-consuming. We introduce a method that identifies reappearing structures in such systems and allows to study slow, long-lasting processes on highly dynamic backgrounds at low computational costs for applications like steelmaking and chemical process industries to environmental flows like atmospheric aerosol transport.



UPCOMING

LIT

LECTURE:

14 MAR. 2018

12:00

Projects to be presented:

Armin Biere: "Teaching Computational Thinking via Logical Modeling and Reasoning"

Irene Tiemann-Boege: "Analyzing the expansion of selfish mutations in the male germline"

Gerhard Widmer: "AI, Machine Learning & Music"