JYU LINZ INSTITUTE OF TECHNOLOGY

LIT LECTURES

15 NOVEMBER 2017, 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 15 November 2017!

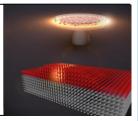
Finger food provided.

Please register latest by 6 November https://www.reglist24.com/lit_lecture.

"Moving data using silicon lasers"

Moritz Brehm (LIT / Institute of Semiconductor and Solid State Physics)

Silicon photonics aims at reducing the global energy consumption and increasing data transfer rates in nowadays electronic devices and data centers by using light instead of electrical current to move data. For this purpose, laser-sources have to be directly implemented on such a silicon platform. Within LIT we develop a novel approach of creating a silicon-laser based on atomic-scale engineering in quantum dots.



"Wearable Insights"
Fabiola Gattringer (LIT / Institute of Education and Psychology)



The project aims to explore the potential of wearables to enrich psychological research by providing opportunities to collect less reactive "objective" data in real-life settings. Complementing survey data with behavioural or physiological data can increase knowledge about psychological constructs and help test the robustness of questionnaire-based findings.

"5G Secure Communications in Industrial Production Environments"

Andreas Springer (LIT / Institute for Communications Engineering and RF-Systems)

An immense number of users in future wireless communications will be machines To enable secure operation and communication for such devices, we propose an interdisciplinary approach that combines cryptographic methods with physical unique communication and location parameters.



UPCOMING LIT LECTURE: 10 JAN. 2018 12:00

Projects to be presented:

Stefan Müllegger: "Single atom radio frequency fingerprinting" Nicole Kronberger: "Neuroenhancement in everyday life" Thomas Lichtenegger: "Recurring patterns in gas-solid flows"





