## LIT LECTURES

## 14 MARCH 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.

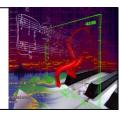
The next three topics are presented on 14 March 2018!

Finger food provided.

Please register latest by 6 March <a href="https://www.reglist24.com/lit-lecture">https://www.reglist24.com/lit-lecture</a>.

"Con Espressione! AI, Machine Learning & Music"
Gerhard Widmer (Department of Computational Perception)

Music is a wonderful thing, and as a complex manifestation of human intellect and creativity, it is a wonderful object of study for a discipline that calls itself Artificial Intelligence. We will look at recent AI research that tries to shed new light onto a central musical art: expressive performance. The audience will be subjected to a little experiment, which may, or may not, yield a surprising result.



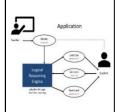
"Ultra-sensitive sequencing-the path to discovering rare mutations" Irene Tiemann-Boege (LIT / Institute of Biophysics)



Mutations include single changes in our DNA that are as hard to detect as a needle in a haystack. To date, finding mutations in the human genome involves an enormous sequencing effort or is limited by technical artifacts. Our USS project is devised to discover individual mutations in our genome at an unprecedented sensitivity by using smart bioinformatics and creative molecular design.

"Teaching Computational Thinking via Logical Modeling and Reasoning" Armin Biere (LIT / Institute for Formal Models and Verification)

Computational thinking is one of the most important skills today. Besides algorithmic aspects, the key in computational thinking is precise formal modeling and reasoning, based on mathematical logic. In the LOGTECHEDU project, we are building software based on logic to aid education in science, technology, engineering and mathematics and to support students to better understand logic itself.



UPCOMING LIT LECTURE: 09 MAY 2018 12:00 Projects to be presented:

Andreas Müller: "Exoskeletal Robotic Systems"

Astrid Pechstein: "Mixed Finite Elements for Smart Materials and Structures" K. Bruckmüller / S. Schumann: "Whom to Blame when Algorithms Fail? Autonomous Driving in Austria – Preconditions by & a Challenge for Criminal Law"





