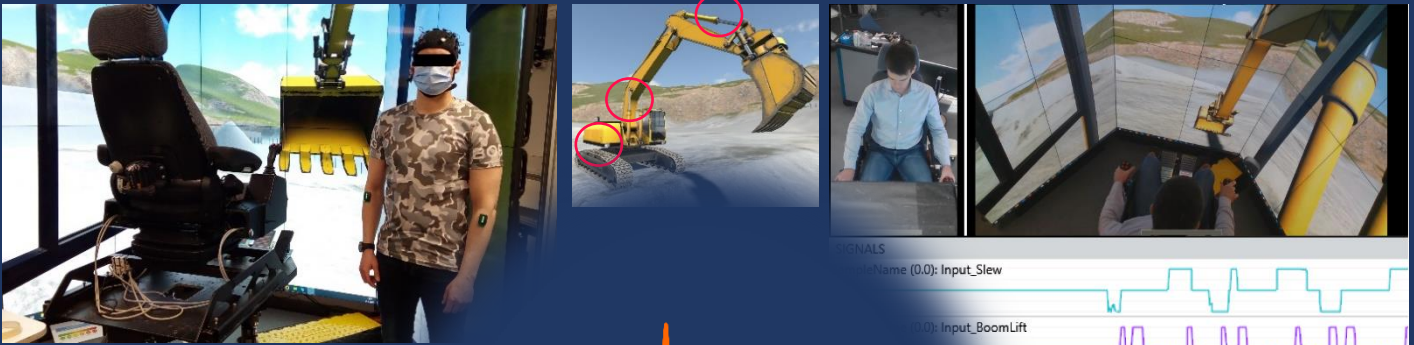


# Improving future heavy machines by measuring operator stress

Research seminar 18.11.2021 on-site at LUT University and online

Registration open until 16.11.2021



LUT ERGO



What induces stress  
in heavy machine operators?  
How to quantify the stress?  
How to use stress data to  
improve the human-machine  
system?



## Seminar agenda:

- 12:00 – 12:10 Short description of LUTERGO-project (Heikki Handroos, LUT)
- 12:10 – 12:30 Kaivinkoneen kuljettajan työssä kuormittuminen ja stressitekijät (Sari Soutukorva, LAB)
- 12:30 – 12:50 Simulation model, environment, and data collection in real-time simulator
- 12:50 – 13:10 Tasks, parameter variations and experiments (Victor Zhidchenko, LUT)
- 13:10 – 13:20 BREAK
- 13:20 – 13:40 Kaivinkoneen kuljettajan kuormittuminen simulaatioympäristössä työskennellessä (Asko Kilpeläinen, LAB)
- 13:40 – 14:20 Operator stress detection from biosignals (Amin Hekmatmanesh, LUT)
- 14:20 – 14:40 Kaivinkoneen kuljettajan kuormitusta selittävät tekijät (Kari Kauranen, LAB)
- 14:40 – 14:50 Summary of the seminar (Heikki Handroos, LUT)
- 14:50 – 15:00 BREAK (Moving to laboratory)
- 15:00 – 16:00 **Visit to LUTERGO-laboratory** (simulator test drive and demonstration of the parallel collection of biosignal and simulator data)