

Talk on Wednesday, 17. November 2021

Start: 16:15 Uhr (bis 17.30 Uhr)

Online Stream: <https://uni-salzburg.webex.com/meet/manuel.schabus>

& in room HS 402

The talk will be presented in English

Benefits and pitfalls of mobile EEG

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Progress has been made in recording brain-electrical activity outside of the laboratory. However, currently available EEG systems are still too cumbersome to be used routinely, in daily-life situations. I will sketch out our vision of a next-generation transparent EEG that would not only be portable and motion-tolerant, it would also feature low visibility and generally minimal interference with daily-life activities. In order to achieve these long-term goals, we started to use smartphones for EEG acquisition, stimulus presentation and online signal processing. In addition, we have developed ear-EEG

technology with the aim to capture meaningful brain activity unobtrusively. However, many issues remain to be tackled. I will summarize some successful applications of mobile EEG and discuss challenges that need to be overcome in order to achieve an unobtrusive monitoring of brain states in daily-life situations.