

## Scheduling 'Eureka' moments

Initiative: "Experiment!" (beendet)

Ausschreibung: Explorative Phase

Bewilligung: 18.12.2019

Laufzeit: 1 Jahre 6 Monate

Projekt-Website: <https://eureka.wiwi.uni-siegen.de/>

Mind wandering is a ubiquitous and pervasive mental activity. Scientists such as Albert Einstein or Daniel Kahneman report that some of their most pertinent ideas emerged when their mind had been wandering. Their creative thinking occurred unexpectedly and when they least counted on it. What if we could stimulate or induce those kinds of 'Eureka' or 'Aha' moments by increasing the likelihood of mind wandering episodes? Pursuing this goal is highly relevant, because the ability for divergent thinking is one of humans' most valuable asset that cannot easily be replaced by machines. The authors seek to answer this question through an experimental evaluation and the triangulation of self-reports and synchronized physiological measures (electroencephalography and eye tracking). The results can have significant novel implications for the design of digital workplaces and contribute to the appreciation of the irreplaceable 'human' capability to find innovative solutions.

### Projektbeteiligte

#### **Dr. Michael Klesel**

Universität Siegen

Fak. Wirtschaftswissenschaften/-informatik/-recht

Institut für Wirtschaftsinformatik

Siegen

#### **Prof. Dr. Rene Riedl**

Universität Linz

Institut für Wirtschaftsinformatik

Linz

Österreich

#### **Prof. Dr. Gernot Müller-Putz**

Technische Universität Graz

Institute of Neural Engineering

Graz

Österreich

**Prof. Dr. Dr. Björn Niehaves**

Universität Siegen

Fakultät III

Lehrstuhl für Wirtschaftsinformatik

Ludwig Wittgenstein Haus (LWH)

Siegen