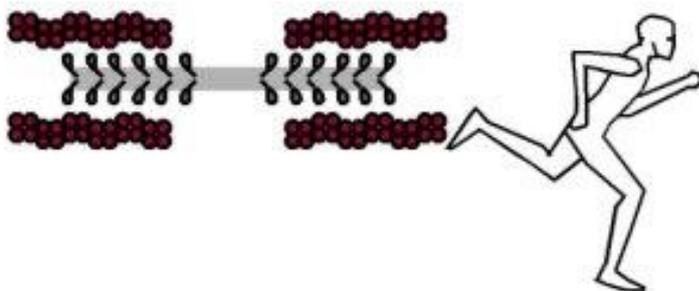


ACAGACACTG  
AGAAGGTATT  
TGGGGTGTCA



# Scientific interpretation of heart rate variability, fatigue and stress measured with in-ear sensor

Cooperation project of the company cosinuss and the Chair Exercise Biology (TUM)

## Master thesis in sports science

**Start:** as soon as possible

### Project description

In this project, we would like to take a deeper look into the scientific interpretation of the heart rate variability (HRV) and it's corresponding parameters fatigue and stress using heart rate data measured with an in-ear sensor.

The main purpose is to research the interpretation and possible evaluations of HRV parameters and their application in different scenarios (performance sports, occupational safety, medical).

Main research questions:

- Which HRV parameter are there?
- What is the interpretation of these parameter?
- What information can we get out of the analysis and how can we present the results?

Before starting with the data collection and evaluation, a literature research on the different HRV parameters shall be conducted.

### Requirements

Interested in modern techniques.

### Supervision

Dr. Martin Schönfelder, (Exercise Biology)  
Dr. Fabian Stöcker (Prevention & Performance Labs)  
E-Mail: martin.schoenfelder@tum.de  
Phone: 089-289-24410

### Contact at cosinuss

Tim Adams  
E-Mail: t.adams@cosinuss.com

