Preliminary Program

Date: September 10 – September 13, 2018

Location: Donders Centre for Cognitive Neuroimaging
Kapittelweg 29, Nijmegen, The Netherlands

Monday September 10, 2018  PRE-SESSION: REVIEW OF THE BASICS

09:00 - 10:00 Welcome, registration & coffee

10:00 - 10:15 Introduction & overview of the day  Ian Cameron
10:15 - 10:45 Physics and mechanisms of TMS  Ian Cameron
10:45 - 11:30 Basics of TMS experimental approaches  Leonore Bovy

Coffee break (15 minutes)

11:45 - 12:00 TMS safety & guidelines  Leonore Bovy
12:00 - 12:30 Determining TMS site, positioning & intensities  Leonore Bovy
12:30 - 13:30 Lunch

13:30 - 14:30 HANDS ON APPLICATION OF TMS

Coffee break (15 minutes)

14:45 - 15:15 Physics and mechanisms of TDCS/TACS  Ian Cameron
15:15 - 15:45 Basics of TACS & TDCS experimental approaches  Wei Liu
15:45 - 16:15 TDCS/TACS safety & application  Ian Cameron

Coffee break (15 minutes)

16:30 - 18:00 HANDS ON APPLICATION OF TDCS/TACS
Tuesday September 11, 2018  ADVANCED TDCS/TACS AND NEUROIMAGING

09:00 - 10:00  Welcome, registration & coffee

10:00 - 10:15  Introduction & overview of the Tool-kit  Ian Cameron

10:15 - 11:15  Introduction to brain stimulation & imaging  Ian Cameron

11:15 - 12:30  KEYNOTE LECTURE:  Combining brain stimulation with neuroimaging

12:30 - 13:30  Lunch

13:30 - 14:30  Practicalities and applications of TDCS/TACS-fMRI  Freek Nieuwhof, Eva Klimars, Bob Bramson

14:30 - 15:00  Practicalities and applications of TDCS/TACS-MEG  Tom Marshall

15:00 - 16:00  DEMOS: SIMULTANEOUS TDCS/TACS-fMRI and TDCS/TACS-MEG

16:00 - 17:00  Advanced TDCS/TACS approaches and protocols  Tom Marshall, Ian Cameron

17:00 - 18:00  Open discussion session

19.00 - 22.00  Social dinner
### ADVANCED TMS AND NEUROIMAGING

**Wednesday September 12, 2018**

<table>
<thead>
<tr>
<th>Time</th>
<th>Event</th>
<th>Speaker(s)</th>
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</thead>
<tbody>
<tr>
<td>09:30</td>
<td><strong>Fundamentals of combining TMS with EEG</strong></td>
<td>Til Ole Bergmann</td>
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<tr>
<td>10:30</td>
<td><strong>KEYNOTE LECTURE:</strong> Transcranial alternating current modulates EEG oscillations and cognition</td>
<td>Christoph Herrmann</td>
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<td>11:45</td>
<td>Lunch</td>
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<td>12:45</td>
<td><strong>PRACTICAL DEMONSTRATION: TMS-EEG</strong></td>
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<td>14:15</td>
<td><strong>Triggering TMS based on EEG-defined brain states</strong></td>
<td>Til Ole Bergmann, Christoph Zrenner</td>
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<td>14:45</td>
<td>Coffee break (15 minutes)</td>
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<tr>
<td>15:30</td>
<td><strong>DEMO / HANDS ON EEG-TMS triggering (using Matlab/Simulink)</strong></td>
<td>Christoph Zrenner</td>
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<td>16:30</td>
<td><strong>Advanced TMS approaches and protocols</strong></td>
<td>Dilene van Campen</td>
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<td>17:30</td>
<td><strong>Posters session, discussion, &amp; drinks</strong></td>
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<td>The goal of presenting a poster is to get feedback on any specific proposals/data from our experts. You can choose to present whatever you would like. The organizers will also bring posters of our current work or future plans.</td>
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<td>21.00</td>
<td>Social drinks</td>
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Thursday September 13, 2018  MODELING BRAIN STIMULATION

10:00 - 11:30  **KEYNOTE LECTURE:**
Modeling the effects of stimulation on the brain

Axel Thielscher

11:30 - 12:30  **Lunch**

12.30 - 12:45  **Introduction to FieldTrip**
Robert Oostenveld

12:45 - 13:15  **Introduction to analysis of TMS-EEG data**

13:15 - 15:45  **HANDS ON TMS-EEG analyses (FieldTrip)**

15:45 - 16:00  **Wrap up**