<table>
<thead>
<tr>
<th>Week 3</th>
<th>Week 4</th>
<th>Week 5</th>
<th>Week 6</th>
<th>Week 8</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tue Jan 18</td>
<td>Wed Jan 19</td>
<td>Tue Jan 25</td>
<td>Wed Jan 26</td>
<td>Tue Feb 1</td>
</tr>
<tr>
<td>10:15-12:00</td>
<td>L1</td>
<td>L4</td>
<td>L5</td>
<td>L8</td>
</tr>
<tr>
<td>13:15-15:00</td>
<td>L2</td>
<td>Ex1</td>
<td>L6</td>
<td>Ex2</td>
</tr>
<tr>
<td>15:15-17:00</td>
<td>L3</td>
<td></td>
<td>L7</td>
<td></td>
</tr>
</tbody>
</table>

**PART 1 - Lectures: Basic image analysis methods**

**DM, OK**
- L1 Introduction to digital images and MAX IV
- L2 Pointwise operations/Image transforms
- L3 Filtering and pre-processing + morphology
- L4 Color + multispectral images
- L5 Segmentation + distance transform
- L6 Feature extraction
- L7 Classification I
- L8 Classification II, machine learning
- Ex1 ImageJ
- Ex2 CellProfiler
- L9 Advanced image segmentation
- Ex3 TBD

**PART 2 - Applications and advanced topics**

- L10 Research methodology and research ethics in image analysis
- L11 Future perspectives and possibilities on MAX IV images and analysis
- Exam
- Project presentations

---

**Lecturer**
- DM: Damian Matuszewski
- RS: Robin Strand
- CW: Carolina Wahlby
- CA: Christophe Avenel
- IMS: Ida-Maria Sintorn
- AK: Anna Klemm
- ABD: Anders Bjorholm Dahl (Professor at the Technical University of Denmark (DTU) and head of QIM: The Center for Quantification of Imaging Data from MAX IV)
- AP: Alexandra Pacureanu (research scientist responsible of nanoscale X-ray neuroimaging at ESRF, the European Synchrotron)
- OK: Oxana Klementieva (MAX IV / LU)