



FROM VISION TO DECISION

## SEMINAR FRIDAY 17.06.2016

MS "Atløy", leaving from Dreggen 13:00-16:00  
Lunch will be served on board

### Summer Seminar MedViz & VCF



**Please register for participation:**

<https://www.survey-xact.no/LinkCollector?key=DNDSUWT49632>

**Professor** Jan Modersitzki

Fraunhofer MEVIS, Lübeck;

Institute of Mathematics and Image Computing, University of Lübeck, Germany

<http://www.mevis-hl.fraunhofer.de/>, <http://www.mic.uni-luebeck.de/>



### Correspondence Problems in Medical Imaging

#### Abstract:

In this talk we present a brief overview on Fraunhofer MEVIS, an institute for computer support for image-based medicine. In particular, we show a variety of medical correspondence problems. Given are two or more data sets that are taken at different times, from different devices or perspectives. The goal is to automatically establish correspondences of objects within the data sets.

We present an unified mathematical framework which is based on a variation approach and leads to a joint energy function with data-t and regularization. This approach enables broad modelling options, is mathematically sound and leads to standard optimization problems. Finally, we present some new ideas related to hyper-elastic regularization and show very promising results for motion correction in applications such as EPI or PET reconstruction.

### Summer greeting

**Kåre Rommetveit:** Bergen Research Foundation

