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EVENT ABSTRACT

Data analysis competition: connectivity and multivariate classification approaches

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While there are a number of advanced data analysis techniques that allow us to embrace distributed electrophysiological activity measured by MEG, these tools are somewhat underexploited. This includes measures of connectivity and multivariate classification approaches. Prior to the meeting data set for the competition have been made available to the community. The aim of the competition is to: Promote the development and application of new analysis techniques for distributed brain activity; make the audience aware of novel approaches; elucidate the pros and cons of the current methodology. Which assumptions are behind a given approach? What are the limitations and caveats? Attract signal-processing experts from outside the MEG field. Encourage a discussion on the cognitive insight which the techniques can bring about. The first part of the competition has been based on real and simulated data sets in which task-dependent functional connectivity has been assessed. In the second part, the goal was to apply multivariate approaches to classify two conditions from a real data set. During the workshop we will present the three winners of the competitions. The winners will shortly present their approaches and pros and cons will be discussed with the audience.

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