



PhD position in MR spectroscopy data analysis

The High-Field MR Center (MRC) at the Max Planck Institute for Biological Cybernetics in Tübingen / Germany invites applications for one PhD position in the area of magnetic resonance spectroscopy (MRS) quantification. The specific aim is the development of novel spectral fitting algorithms for the quantification of in vivo magnetic resonance spectroscopic imaging, time resolved MRS and 2D COSY MRS data and may include a sequence implementation part for 2D resolved MRS as well. This work will build up on an existing spectral fitting algorithm (ProFit V2) and related implementations in MATLAB. The project is part of a collaborative effort to develop a clinical decision support system based on quantitative multi-modal MRI funded by the European Union and will hence require cooperation with software developers, postdocs and PhD students in Tübingen, Switzerland, the Netherlands and the UK.

The MRC Department is equipped with two human whole body Siemens MRI systems (3 T and 9.4 T) and one Bruker 14.1 T rodent MRI scanner, a computation cluster, a RF lab and a biochemical lab for MR contrast agent development. The MRC Department is also affiliated to the Department of Neuroimaging and MR-Physics at the University Hospital Tübingen, which allows implementation and application of new MR techniques within a clinical setting at the 3T whole body Siemens research systems.

Applicants for this position should have an electrical engineering, computational science, physics or mathematics background and possibly experience in either image processing, signal processing, MRI or NMR methods development, need good English language skills, be able to work independently, get acquainted with new methods and knowledge quickly and be able to work in a team with other software engineers, postdocs and PhD students.

The position is **available from September 1st 2015** on and intended for a **period of 5 years**. Payment is in line with the regulations of the Max Planck Society according to TV-L West E13 / 2. The position is available until filled.

The Max Planck Society is an equal opportunity employer: women, people from minority groups and handicapped individuals are strongly encouraged to apply.

Applications should include a letter of motivation, a curriculum vitae including a sufficiently detailed description of previous work experience especially in the field of signal processing and magnetic resonance imaging, a list of publications (peer-reviewed original articles; review articles; book chapters; conference contributions; other) and / or previous projects, PhD and Master certificates (including a list of classes taken during Bachelor and Master studies); three reference letters and related contact details of the referees.

All materials should be sent to anke.henning - at - tuebingen.mpg.de electronically or to

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Further information on the Max Planck Institute for Biological Cybernetics and the positions on offer can be obtained at www.kyb.tuebingen.mpg.de and via anke.henning - at - tuebingen.mpg.de.