



# PhD and postdoc position on PET-MRI image reconstruction

## Description of research environment:

The MEDISIP (<http://medisip.elis.ugent.be/>) group consists of 2 professors, 3 post-docs and 20 PhD students. During the past 15 years, the group has been active in the field of medical signal processing (EEG, ERP) and medical imaging (SPECT, PET, MR). The current research of MEDISIP is focussed on multimodality imaging.

MEDISIP is located at the University Hospital (UZ Ghent) and collaborates with the department of radiology, neurology and cardiology. The group is involved in several collaborations (one image reconstruction, Monte Carlo simulation and system design) with universities in Belgium (KU Leuven, VUB, UA) and medical imaging companies (Barco, Agfa, Philips, Siemens) and with research groups in Europe (Utrecht, Paris,...) and the United States (UPENN,...). A complete multimodality small imaging lab (PET,SPECT, CT, MRI, US) has been setup during the last years for preclinical imaging. This setting allows accelerated development of new imaging technology.

Applicants will be working on a European project (EU FP7 Sublima), lead by Philips Research (Eindhoven, The Netherlands), to develop simultaneous PET-MRI systems through Monte-Carlo simulations and new image reconstruction algorithms.

## Profile:

You have a Masters in Engineering (Biomedical Engineering, Applied Physics, Computer Science Engineering, Electrical Engineering) or a Master in Science (Mathematics, Physics or Applied Physics). Candidates for postdoc positions should have a PhD in a relevant domain. PhD Candidates finalizing their master will be considered.

You are a collaborative dynamic person who likes to work in a multidisciplinary research environment. You are flexible and are willing to pursue deadlines. You are willing to travel abroad for meetings. You have a good background in simulation reconstruction and/or image processing and have knowledge about programming (Java, C++, Matlab).

## How to apply:

Applicants should send their application (motivation letter + CV + English language certificate) to [Stefaan.Vandenberghe@ugent.be](mailto:Stefaan.Vandenberghe@ugent.be)