



**Research disciplines:** Cardiac ultrasound imaging, ultrasound image segmentation, real-time computing

**Research environment:** The Lab on Cardiovascular Imaging & Dynamics is part of the department of Cardiovascular Sciences (<http://gbiomed.kuleuven.be/english/research/50000635/index.html>) of the University of Leuven ([www.kuleuven.be](http://www.kuleuven.be)) and is located within the Medical Imaging Research Center ([www.medicalimagingcenter.be](http://www.medicalimagingcenter.be)) of the University Hospital Gasthuisberg ([www.uzleuven.be](http://www.uzleuven.be))

**The project:** Our lab has developed – in collaboration with CREATIS, Lyon – a new segmentation framework (referred to as BEAS, Barbosa et al. IEEE-TIP 2012) towards fast and accurate segmentation of volumetric ultrasound images. The goal of this PhD project is to further automate this algorithm and to implement it on an experimental ultrasound platform in order to achieve fully automatic real-time volume measurements of the heart.

## Profile:

Master in Mathematics, Physics , Computer Sciences or Engineering.

A background in image processing, Matlab / C++ programming and GPU/FPGA programming are assets.

**Position:** We offer a 4 year scholarship to prepare for a PhD including full health insurance.

**Start date:** As soon as possible (but summer 2014 is an option for students currently in their Masters)

**Deadline for application:** February 14<sup>th</sup> 2014

**How to apply:** Send your CV + motivation letter by Email to [jan.dhooge@uzleuven.be](mailto:jan.dhooge@uzleuven.be)

**More info:** [jan.dhooge@uzleuven.be](mailto:jan.dhooge@uzleuven.be)

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