# PhD position in ultrasound motion estimation

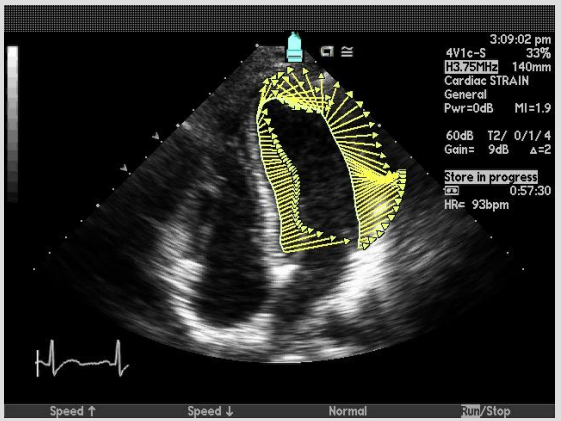
**Research disciplines:** Cardiac ultrasound imaging, ultrasound-based motion estimation

**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) and is located within the Medical Imaging Research Center (www.medicalimagingcenter.be) of the University Hospital Gasthuisberg (www.uzleuven.be)

**The project:** Our lab is developing new imaging methodologies for volumetric imaging of the heart at high spatio-temporal resolution. Moreover, over the years, several ultrasound motion estimation methodologies have been developed (e.g. RF-based block matching; envelope-data based block matching; elastic registration). The goal of this PhD project is to develop a hybrid motion estimator that is particularly suited for motion estimation of these new high frame rate volumetric data.

**Profile:**
Master in Mathematics, Physics , Computer Sciences or Engineering.
A background in ultrasound imaging, signal / image processing, Matlab / C++ / GPU 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 14th 2014

**How to apply:** Send your CV + motivation letter by Email to jan.dhooge@uzleuven.be

**More info:** jan.dhooge@uzleuven.be (+32.16.34.90.12)