



## CVII -STENT 2014 – First Call for Papers

This workshop brings together two very successful MICCAI-Workshop series (CVII and STENT) in order to form a common event on technological and scientific research concerned with endovascular procedures. A continuous communication between surgeons/physicians and scientific and industrial researchers is crucial for bringing forward innovative solutions to the clinics: we aim to provide an interchange platform for medical experts and technological researchers concerned with all aspects of endovascular interventions.

The workshop will focus on imaging, treatment and computed assisted technological advances in diagnostic and intraoperative imaging. Such techniques offer increasingly useful information regarding vascular anatomy and function and are poised to have dramatic impact on the diagnosis, analysis, modeling, and treatment of vascular diseases.

CVII-STENT will be a unique platform for scientific discussion of endovascular stenting and intravascular imaging and is highly complementary to the main MICCAI conference.

Relevant topics for the workshop include (but are not limited to):

### CVII

- Atherosclerotic plaque image analysis and characterization
- Quantification of vascular morphology and function
- Tissue classification of intravascular images
- Computer--aided diagnosis of vascular disease
- Segmentation and anatomic modeling from IVUS, OCT, CTA, X-ray angiography, IVMR, ...
- Image--based biomechanical models of vascular anatomy and function
- Registration of intravascular images
- Image processing methods for intravascular contrast agent applications
- Hemodynamic image-based modeling
- Percutaneous imaging/intervention, including IVUS, OCT and IVMR.

### Important dates

Abstract submission  
Full Paper submission  
Author notification  
Camera-ready submission  
Workshop

### STENT

- Imaging for struts/stent detection, reconstruction, and assessment
- Computer-aided interventions for stenting procedures
- Detection and visualization of fluid dynamic changes induced by stents
- Computer-aided diagnosis of post-deployment diseases (neo-intima growth, stent malposition)
- Planning and navigation of vascular treatments
- Segmentation, registration and anatomic modeling of vascular images
- Image-based biomechanical and hemodynamic models of stents, vascular anatomy, and function
- Analysis and improvement of stent design
- Virtual stenting and virtual deployment
- Monitoring and follow-up for stent implants

May 26, 2014  
June 2, 2014  
July 1, 2014  
July 5, 2014  
September 14, 2014

### CVII Chairs

Gozde Unal (Sabanci University)  
Petia Radeva (University of Barcelona)  
Amin Katouzian (Technical University of Munich)  
Maria A. Zuluaga (University College London)

### STENT Chairs

Stefanie Demirci (Technical University of Munich)  
Su-Lin Lee (Imperial College London)  
Simone Balocco (University of Barcelona)  
Geir Arne Tangen (SINTEF)  
Markus Kowarschik (Siemens Healthcare)

For more details please visit: <http://campar.in.tum.de/STENT2014>