

## Course Faculty

### Aernout Beek

Department of Cardiology, VU Medical Center  
Amsterdam, The Netherlands

### Oliver Bruder

Department of Cardiology, Elisabeth Hospital  
Essen, Germany

### Philip Kilner

Royal Brompton Hospital  
London, United Kingdom

### Massimo Lombardi

Clinical Physiology Institute  
CNR National Research Council  
Pisa, Italy

### Heiko Mahrholdt

Department of Cardiology  
Robert-Bosch-Medical Center  
Stuttgart, Germany

### Bogdan Marcu

Department of Cardiology, VU Medical Center  
Amsterdam, The Netherlands

### Steffen Petersen

The London Chest Hospital  
United Kingdom

### Sven Plein

University of Leeds  
United Kingdom

### Jürg Schwitter

Cardiac MR Centre, University Hospital  
Lausanne, Switzerland

### Albert van Rossum

Department of Cardiology, VU Medical Center  
Amsterdam, The Netherlands

## Course Information

### Course Organizers

Working group on  
Cardiovascular Magnetic Resonance  
of the European Society of Cardiology (ESC)

### Course Directors

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Oliver Bruder, MD

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### Registration

Medconvent  
Congress Services  
Amina Dastmaltschi

A Convention by  
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### Course Fee

incl. two nights hotel accomodation: € 950  
please register online: [www.cmr-course.de](http://www.cmr-course.de)

### Venue

Munich Airport Marriott Hotel  
Alois-Steinecker-Straße 20  
85354 Munich (Bavaria), Germany

Phone +49 8161 966 0  
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## 4th Annual European Course on

# Cardiovascular Magnetic Resonance

Munich, Germany  
June 7 - 9, 2012

## Objectives

The EuroCMR course is designed for cardiologists, radiologists and technologists interested in obtaining basic knowledge on the principles and clinical practice of cardiovascular magnetic resonance (CMR).

Upon completion of this three-day lecture and hands-on course the participants should be able to:

**Acquire** general knowledge on basic CMR imaging techniques.

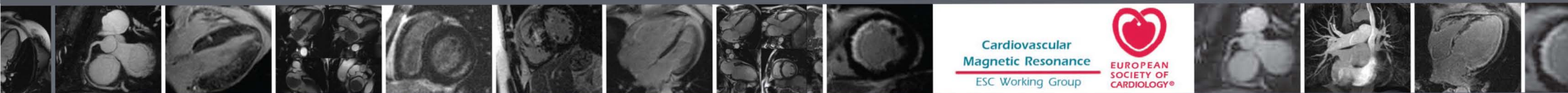
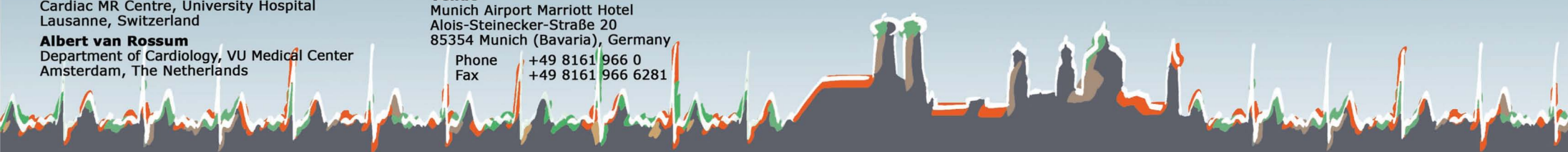
**Apply** these CMR imaging techniques for the most common clinical indications.

**Utilize** CMR imaging for the clinical work-up of coronary artery disease and myocardial viability.

**Demonstrate** familiarity with the implementation of a basic CMR exam, and evaluate the specific imaging protocols for the most common referrals.

**Read and interpret** CMR images.

**Prepare** for the EuroCMR exam.



Cardiovascular  
Magnetic Resonance  
ESC Working Group



EUROPEAN  
SOCIETY OF  
CARDIOLOGY®

## Program

### Thursday CMR Basics

- 13:00-13:15 Welcome/Introduction (Heiko Mahrholdt/Oliver Bruder)
- 13:15-13:45 Technical considerations: The Basics of CMR Part I (Sven Plein)
- 13:45-14:15 CMR Safety (Massimo Lombardi)
- 14:15-15:00 Technical considerations: The Basics of CMR Part II (Sven Plein)
- 15:00-15:15 How to do CMR anatomy and function (Oliver Bruder)
- 15:15-16:00 How to do CMR perfusion (Sven Plein)
- 16:00-16:30 Coffee Break
- 16:30-17:00 How to do LGE CMR (Heiko Mahrholdt)
- 17:00-17:30 How to do CMR flow assessment (Philip Kilner)
- 17:30-18:00 How to do T2/T2\* imaging (Massimo Lombardi)
- 18:00-20:00 Case Reading/hands-on in groups (all)
- 20:00 Dinner

### Friday CMR in the clinical arena and hands-on training

- 08:30-09:00 Imaging artifacts and trouble shooting (Aernout Beek)
- 09:00-10:00 Work-up of suspected coronary artery disease:  
- Dobutamine stress in the clinical arena (Oliver Bruder)  
- Adenosine perfusion in the clinical arena (Jürg Schwitter)
- 10:00-10:30 Work-up of myocardial viability:  
- Late gadolinium enhancement (Heiko Mahrholdt)
- 10:30-10:45 Coffee Break
- 10:45-11:45 Cardiomyopathies and myocarditis (Heiko Mahrholdt)
- 11:45-12:15 Special lecture - Thalassemia (Massimo Lombardi)
- 12:15-13:00 Lunch Break

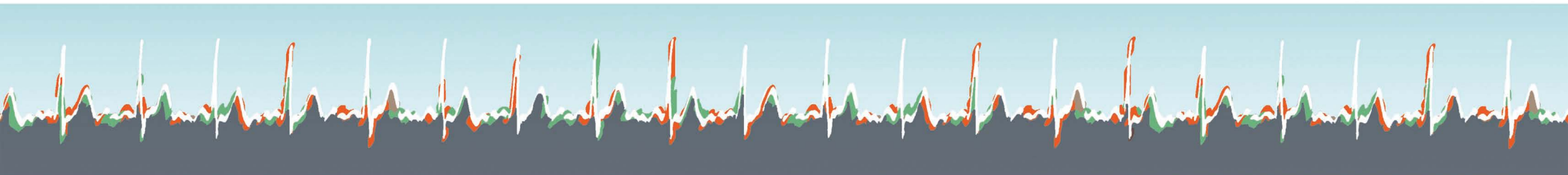
- 13:00-13:45 Valvular heart disease (Philip Kilner)
- 13:45-16:00 Case reading/hands-on in groups (all)  
- Ischemia cases (Steffen Petersen)  
- Late Gad cases (Oliver Bruder)
- 16:00-16:15 Coffee Break
- 16:15-17:00 Coronary arteries, cardiac masses and pericardium (Bogdan Marcu/Albert van Rossum)
- 17:00-18:00 Ask the expert:  
- Cases from the participants  
- Expert panel: all
- 19:30 Departure:  
Social Event

### Saturday CMR in the clinical arena and EuroCMR exam training

- 09:00-09:45 Congenital heart disease made easy (Aernout Beek)
- 09:45-10:30 Case reading/hands-on (all)
- 10:30-10:45 Coffee Break
- 10:45-12:30 EuroCMR exam training (Steffen Petersen)
- 12:30-13:00 Exam results/Discussion (Steffen Petersen)
- 13:00-13:45 Closing remarks (Oliver Bruder/Heiko Mahrholdt)

This course is supported by an educational grant from

**Siemens**



**!!! Online case reading open 24/7 during the entire course !!! Online case reading open 24/7 during the entire course !!!**