

**First European Conference for Standardization of  
Advanced ECG Analysis in Arrhythmia Diagnostics  
2013 Focus: Quantification of the Atrial Fibrillation Substrate Complexity**

**Final Program**

**Endorsed by:**

**European Heart Rhythm Association (EHRA, a registered branch of the ESC),  
The German Competence Network of Atrial Fibrillation (AFNET),  
and the ESC Working Group for e-Cardiology**

**Lugano, Switzerland, December 4, 2013**

**Venue: Aula Magna, Campus of the Università della Svizzera Italiana (USI)**

**Conference Chairs: Lukas Kappenberger, Ulrich Schotten**

**Session I: Introduction and basic concepts**

Chair: Lukas Kappenberger

8.00	8.05	Welcome & introduction	Lukas Kappenberger	Lugano
8.05	8.20	The need for standardization of the assessment of AF complexity based on ECG	Ulrich Schotten	Maastricht
8.20	8.35	Quo vadis, advanced ECG analysis of cardiac arrhythmias?	Marek Malik	London
8.35	8.50	AF complexity assessed by ECG-I	Yoram Rudy	St. Louis
8.50	9.05	Linear (time versus frequency domain) and nonlinear analysis of AF ECGs	Sergio Cerutti	Milano
9.05	9.20	Distribution of information content of body surface potential map leads	Adriaan van Oosterom	Nijmegen

Coffee break 9.20-9.35

**Session 2: State of the art of ECG-based AF complexity quantification**

Chair: Ulrich Schotten

9.35	9.50	Spatio-temporal assessment of AF complexity by principal component analysis	Marianna Meo	Nice
9:50	10.05	Using atrial fibrillatory rate as outcome predictor in AF management	Pyotr Platonov	Lund
10.05	10.20	Spectral organization index and entropy for AF classification	Jean-Marc Vesin	Lausanne
10.20	10.35	Novel parameters for AF complexity	Raul Alcaraz	Castilla-La Mancha
10.35	10.50	Optimization of AF complexity analysis in diverse patient populations	Stef Zeemering	Maastricht

Coffee break 10.50-11.05

**Break-out session**

11.05-12.45

Group A	Why do we need non-invasive classification of AF based on the ECG?	tbd
Group B	What is the current state-of-the-art in ECG based AF complexity quantification? What are the technical challenges?	tbd
Group C	What could the group of conference participants do to accelerate standardization of AF complexity quantification?	tbd

Lunch 12.45-13.30

**Plenary session with presentation of the break-out session results.**

13.30 - 14.30

Chair: Ulrich Schotten

13.30	13.45	Group A	tbd
13.45	14.00	Group B	tbd
14.00	14.15	Group C	tbd
14.15	14.30	Working assignments for joint conference publication	all

End of conference

14.30



Supported by the FP7 large collaborative project  
European Network for Translational Research in Atrial Fibrillation (EUTRAF)

<http://www.eutraf.eu>