

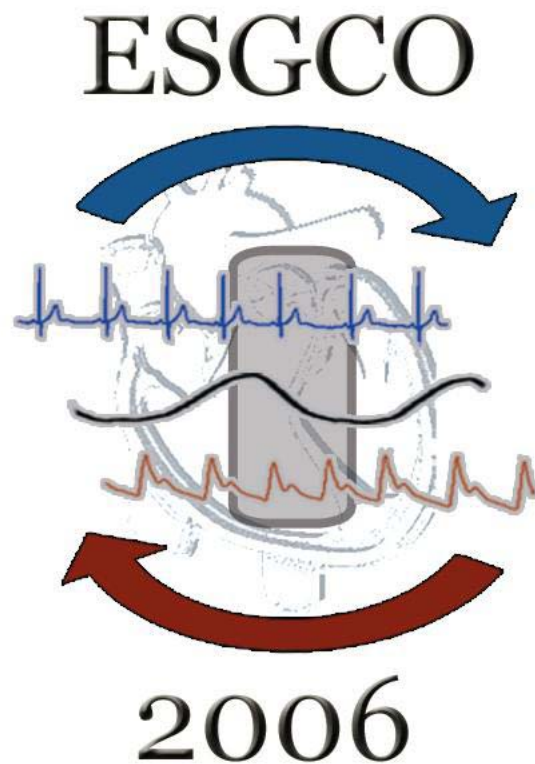
**Conference and meeting of the**

**EUROPEAN STUDY GROUP ON**

**CARDIOVASCULAR OSCILLATIONS**

**ESGCO 2006**

MAY 15 – 17, 2006, JENA, GERMANY



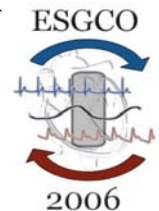
**SCIENTIFIC PROGRAM**

## SCIENTIFIC PROGRAM – OVERVIEW

Sunday, 14 May 2006		Monday, 15 May 2006		Tuesday, 16 May 2006		Wednesday, 17 May 2006	
Time		<b>Registration</b> (Registration Desk, Best Western) 08.00-19.00 h	<b>Registration</b> (Registration Desk, Best Western) 08.00-16.00 h	<b>Registration</b> (Registration Desk, Best Western) 08.00-16.00 h	<b>Registration</b> (Registration Desk, Best Western) 08.00-16.00 h		
	08.45-09.00	<b>Opening Ceremony</b>					
09.00-11.00		Oral Session <b>Clinical Investigations</b>	Oral Session <b>Methods and Modelling</b>	Oral Session <b>Interactions / Uni- and Multivariate Analysis I</b>			
11.00-11.30		Coffee Break Poster Session / Exhibition	Coffee Break Poster Session / Exhibition	Coffee Break Poster Session / Exhibition			
11.30-13.30		<b>Round Table Discussion</b>	<b>Autonomic and Neuronal Disorders and Fetal Development</b>	<b>Interactions / Uni- and Multivariate Analysis II</b>			
13.30-14.30	<b>Registration</b> (Registration Desk, Best Western) 12.00-20.00 h	Lunch Break Poster Session / Exhibition	Lunch Break Poster Session / Exhibition	<b>Closing Remarks</b>			
14.30-15.00				Lunch Break	Lunch Break		
15.00-16.00		Oral Session <b>Cardiovascular Oscillations in Different Levels and Application Fields</b>	<b>Oral Poster Presentations</b>				
16.00-16.30	Guided Tour Jena	Coffee Break Poster Session / Exhibition	Coffee Break Poster Session / Exhibition				
16.30-17.30							Guided Tour Weimar
17.30-18.45	Get-together Reception		Excursion to Freyburg / Unstrut				
18.45 onwards							

Conference and meeting of the  
**EUROPEAN STUDY GROUP ON CARDIOVASCULAR  
OSCILLATIONS 2006**

May 15 – 17, 2006, Jena, Germany



**SCIENTIFIC PROGRAM**

**Sunday, 14 May 2006**

12.00-20.00 Registration (Registration Desk, Best Western Hotel Jena)

15.30-17.30 Guided Tour Jena

17.30 Get-together Reception

**Monday, 15 May 2006**

08.00-19.00 Registration (Registration Desk, Best Western Hotel Jena)

**08.45-09.00 Opening Ceremony**

**09.00-11.00 Clinical Investigations**

**M. Malik, A. Schirdewan**

09.00 O1 P.K. Stein, P.P. Domitrovich, E.J. Lundequum, S.P. Duntley, K.E. Freedland, R.M. Carney  
**Circadian and Ultradian Rhythms in Heart Rate Variability**  
St. Louis, USA

09.20 O2 M. Malik  
**T Wave Pattern Variability**  
London, United Kingdom

09.40 O3 V.K. Yeragani, N. Desai, M. Tancer and M.S. Ramaiah  
**Beat-to-beat QRS Amplitude Variability in Normal Controls: Effects of Posture, Anxiety and Anti-anxiety Agents**  
Detroit, USA

10.00 O4 N. Honzikova, R. Labrova, B. Fiser, E. Maderova, Z. Novakova, E. Zavodna and B. Semrad  
**Influence of Age, Body Mass Index, and Blood Pressure on the Carotid Intima-Media Thickness in Normotensives and Hypertensives**  
Brno, Czech Republic

10.20 O5 S. Akselrod  
**Fetal Autonomic Activity as Obtained by Time-Frequency Analysis of Fetal Heart Rate Variability**  
Tel-Aviv, Israel

10.40 O6 A. Voss, R. Schroeder, S. Truebner, M. Baumert, M. Goernig, A. Hagenow, HR. Figulla  
**Multivariate and Multidimensional Analysis of Cardiovascular Oscillations in Patients with Heart Failure**  
Jena, Germany

11.00-11.30 Coffee Break / Poster Session / Exhibition

**11.30-13.30 Round Table Discussion**

13.30-14.30 Lunch Break / Poster Session / Exhibition

## 14.30-16.00 Cardiovascular Oscillations in Different Levels and Application Fields

S. Cerutti, P. K. Stein

- 14.30 O7 M. Falcke  
**Mechanism of IP3 Induced Intracellular Ca<sup>2+</sup> Oscillations**  
Berlin, Germany
- 14.50 O8 A.M. Bianchi, L. Ferini-Strambi, V. Castronovo, S. Cerutti  
**Multivariate and Multiorgan Analysis of Cardiorespiratory Variability Signals: the CAP Sleep Case**  
Milan, Italy
- 15.10 O9 R. Mrowka, L. Cimponeriu, A. Patzak and M.G. Rosenblum  
**Directionality of Coupling of Physiological Subsystems: Age-related Changes of Cardiorespiratory Interaction**  
Berlin, Germany
- 15.25 O10 A. Porta, S. Guzzetti, E. Borroni, R. Furlan, N. Montano and A. Malliani  
**The Role of Autonomic Nervous System in Generating Non Linear Dynamics in Short-Term Heart Period Variability**  
Milan, Italy
- 15.40 O11 M. Di Rienzo, F. Rizzo, P. Meriggi, P. Castiglioni, G. Parati, B. Bordoni, G. Brambilla and M. Ferratini  
**MagIC System: a Textile-based Wearable System for the Assessment of Vital Parameters in a Clinical Setting and Daily Life**  
Milan, Italy

### Related Posters:

- P1 T. Hennig and P. Maass  
**Long Exponentially Distributed Interbeat Intervals in the ECG of AF Patients Show White Noise Behaviour in Power Spectrum**  
Ilmenau, Germany
- P2 C. Hamann, T. Hennig and P. Maass  
**Influence of Atrio-ventricular Conduction on the Statistical Properties of Ventricular Beat Intervals During Atrial Fibrillation**  
Ilmenau, Germany
- P3 S. Perz, R. Kuefner, K.H. Englmeier, A. Pfeufer, H.-E. Wichmann and S. Kaeb, for the KORA Study Group  
**Variability of QT Interval Estimates Corrected for Heart Rate: Results from a Population-based Follow-up Study**  
Neherberg, Germany
- P4 A.N. Fleishman, S.V. Karpenko and S.A. Kleshchenogov  
**Limited Cycles of HRV: Formation Peculiarities, Clinical and Physiological Interpretation**  
Novokuznetsk, Russia
- P5 S.A. Kleshchenogov and A.N. Fleishman  
**Clinical Risk Stratification Based on HRV in Pregnancy**  
Novokuznetsk, Russia

## 16.00-16.30 Coffee Break / Poster Session / Exhibition

**P. van Leeuwen, M. Vallverdú**

- 16.30 O12 P. Caminal, P. Gomis, M. Vallverdú, S.G. Warren and G.S. Wagner  
**Nonlinear Dynamic Analysis of the Cardiac Rhythm During Transient Myocardial Ischemia**  
Barcelona, Spain
- 16.50 O13 D. Hoyer, B Frank, H. Friedrich, Ch. Goetze, H. Schmidt, R. Baranowski, J.J. Żebrowski, M. Palacios, M. Vallverdú, P. Caminal, A. Bayés de Luna, K. Falkenhahn, K.J. Baer, P.K. Stein  
**Complex Autonomic Dysfunction in Cardiovascular, Intensive, and Schizophrenic Patients assessed by Autonomic Information Flow Functions**  
Jena, Germany
- 17.10 O14 S. Lau, J. Haueisen, E. G. Schukat-Talamazzini, A. Voss, M. Goernig, U. Leder and H.-R. Figulla  
**Low HRV Entropy is Strongly Associated with Myocardial Infarction**  
Jena, Germany
- 17.25 O15 R. Balocchi, F. Cantini, M. Varanini, G. Raimondi, J.M. Legramante and A. Macerata  
**Revisiting the Potentials of Time-domain Indexes in the Short-term HRV Analysis**  
Pisa, Italy
- 17.40 O16 K. Willson and D.P. Francis  
**Towards a Universal Classification System for Time, Frequency and Chaos Domain Methods of Heart Rate Variability Measurement**  
London, United Kingdom
- 17.55 O17 F. Beckers, B. Verheyden, K. Couckuyt and A.E. Aubert  
**Fractal Dimension in Health and Heart Failure**  
Leuven, Belgium
- 18.15 O18 M. Baumert, L. Brechtel, J. Lock and A. Voss  
**Changes in Heart Rate Variability of Athletes During a Training Camp**  
Adelaide, Australia
- 18.30 O19 R.M. Baevsky, V.M. Baranov, A.G. Chernikova, I.I. Funtova, A.V. Pashchenko and J. Tank  
**Heart Rate Variability as Indicator of Cardioregulatory System. Experiment Results of ISS**  
Moscow, Russia

## Related Posters:

- P6 A.V. Pashchenko and R.M. Baevsky  
**New Method for Orthostatic Test Evaluation Based on Heart Rate Variability**  
Moscow, Russia
- P7 S. Guzzeti, E. Borroni, E. Ceriani, N. Montano, C. Cogliati, V.K. Somers, A. Malliani and A. Porta  
**Symbolic Dynamics of Very Short (100 Beats) Heart Period Variability: a Method to Investigate Cardiac Autonomic Modulation**  
Milan, Italy
- P8 K. Malinowska, J.J. Zebrowski, A. Przybylski and R. Baranowski  
**In Search of Precursors of Lethal Arrhythmias on ICD Recordings by Means of Recurrence Plot Analysis**  
Warsaw, Poland
- P9 M. Goernig, C. Tute, M. Liehr, S. Lau, J. Haueisen, H.R. Figulla and U. Leder  
**Spatiotemporal Correlation Analyses: a New Procedure for Standardisation of DC Magnetocardiograms**  
Jena, Germany
- P10 H. Hofer, G. Staude and W. Wolf  
**Sequential Segmentation of Time Series Containing Gradual Changes in Mean: Fitting Multiple Ramp-step Templates**  
Munich, Germany

**Tuesday, 16 May 2006**

08.00-16.00 Registration (Registration Desk, Best Western Hotel Jena)

**09.00-11.00 Methods and Modeling**

**O. Doessel, J.J. Zebrowski**

- 09.00 O20 O. Doessel, M. Reumann, G. Seemann and D. L. Weiss  
**The Missing Link Between Cardiovascular Rhythm Control and Myocardial Cell Modelling**  
Karlsruhe, Germany
- 09.20 O21 K. Grudzinski, J.J. Zebrowski and R. Baranowski  
**A Model of the Sino-atrial and the Atrio-ventricular Nodes**  
Warszawa, Poland
- 09.40 O22 A. Leite, A.P. Rocha, M. Eduarda Silva and O. Costa  
**Modelling Long-term Heart Rate Variability: an ARFIMA Approach**  
Porto, Portugal
- 09.55 O23 R. Maestri, G.D. Pinna, R. Balocchi, G. D'Addio, M. Ferrario, A. Porta, R. Sassi, M.G. Signorini, M.T. La Rovere  
**Clinical Correlates of Nonlinear Indices of Heart Rate Variability in Chronic Heart Failure**  
Montescano, Italy
- 10.10 O24 C. Maier and H. Dickhaus  
**Recurrence Analysis of Nocturnal Heart Rate in Sleep Apnea Patients**  
Heilbronn, Germany
- 10.30 O25 C. Raab, J. Kurths, A. Schirdewan and N. Wessel  
**Normalized Correlation Dimension for Heart Rate Variability Analysis**  
Potsdam, Germany
- 10.50 O26 I.R. Legarreta, M. Xie, A. Link, R.D. Boussetjot, D. Kreiseler, C. Elster, M. Baer and H. Koch  
**Analysis of the Atrial Fibrillation Main Frequency in the PTB ECG Database**  
Berlin, Germany

**Related Posters:**

- P11 S. Bauer, G. Roeder, H. Engel, R. Weber dos Santos, H. Koch and M. Baer  
**Normal Heart Beat, Alternans and Fibrillation in Simulations of a Model for the Rabbit Ventricles**  
Berlin, Germany
- P12 M. Mikulska, J.J. Zebrowski, R. Baranowski  
**On Modelling Heart Rate Variability from a Time Series**  
Warszawa, Poland
- P13 M. Yildiz and Y. Z. Ider  
**Incorporation of Chest Circumference Signal into Model based Analysis of Respiration Influence on HRV**  
Ankara, Turkey
- P14 M. Barbi, A. Di Garbo and R. Balocchi  
**A Simple Integrate-and-fire Model for RSA**  
Pisa, Italy
- P15 M. Pouladian  
**Korotkoff Sounds in Atherosclerosis Detection and Homomorphic Modelling**  
Tehran, Iran

11.00-13.30 Coffee Break / Poster Session / Exhibition

## 11.30-13.30 Autonomic and Neuronal Disorders and Fetal Development

**S. Akselrod, V.K. Yeragani**

- 11.30 O27 M.A. Ritter, M. Deppe, D.G. Nabavi, J. Sommer and E.B. Ringelstein  
**TCD-profiling. A New Window to the Cerebral Microcirculation Using Averaged Analysis of Transcranial Doppler Ultrasound Flow Spectra.**  
Muenster, Germany
- 11.45 O28 B. Frank, M.G. Frasch, U. Schneider, M. Roedel, M. Schwab and D. Hoyer  
**Complexity of Heart Rate Fluctuations in Near-term Sheep and Human Fetuses During Sleep**  
Jena, Germany
- 12.00 O29 K.J. Baer, M.K. Boettger and A. Voss  
**Differences Between Heart Rate and Blood Pressure Variability in Schizophrenia**  
Jena, Germany
- 12.15 O30 P. Castiglioni, G. Merati, A. Veicsteinas, G. Parati and M. Di Rienzo  
**Influence of Sympathetic Vascular Regulation on Heart Rate Scaling Structure: Spinal Cord Lesion as a Model of Progressively Impaired Autonomic Control.**  
Milan, Italy
- 12.30 O31 P. van Leeuwen, D. Cysarz, S. Lange and D. Groenemeyer  
**Increase of Regularity in Fetal Heart Rate Variability with Age**  
Bochum, Germany
- 12.45 O32 M. G. Frasch, T. Mueller, C. Weiss, C. Wicher, M. Loehle, H. Schubert, O. W. Witte, M. Schwab  
**Usefulness of Fetal Heart Rate Variability to Monitor Fetal Well-being**  
Jena, Germany
- 13.00 O33 A. Fiedler, U. Schneider, D. Hoyer, M. Liehr, C. Kaehler and E. Schleussner  
**Fetal Heart Rate Variability in Growth Restricted Fetuses**  
Jena, Germany

### Related Posters:

- P16 A. Žilinskas, J. Žilinskas and A. Varoneckas  
**On Relevance of Heart Rate Oscillations to Characterization of Sleep Stages**  
Vilnius, Lithuania
- P17 R.M. Baevsky, I.I. Funtova, A.V. Pashchenko, A.G. Chernikova, A.M. Sudarev and Y.I. Levin  
**Contact Less Registration of Cardio-vascular System States During Sleep**  
Moscow, Russia
- P18 A. Accardo, G. D'Addio, G. Corbi, G. Russo, N. Ferrara, F. Rengo and G.D. Pinna  
**Fractal Analysis of Heart Rate Variability in Stroke Patients**  
Trieste, Italy
- P19 E.L. Santarcangelo, M. Varanini, G. Carli, S. Migliorini, G. Fontani and R. Balocchi  
**Pain Modulation of HRV in Subjects Highly and Low Susceptible to Hypnosis: Spectral Analysis and Poincaré Plot**  
Pisa, Italy

13.30-14.30 Lunch Break / Poster Session / Exhibition

## 14.30-16.00 Oral Poster Presentations

**H. Dickhaus, M. Di Rienzo**

16.00-16.30 Coffee Break / Poster Session / Exhibition

16.30-23.00 Excursion to Freyburg / Unstrut



## Wednesday, 17 May 2006

08.00-16.00 Registration (Registration Desk, Best Western Hotel Jena)

### 09.00-11.00 Interactions / Uni- and Multivariate Analysis I

**K. H. Chon, R. Bauerschmitt**

- 09.00 O34 Y. Zhong, K.M. Jan and K.H. Chon  
**Frequency Modulation Between Low- and High-Frequency Components of the Heart Rate Variability Spectrum**  
New York, USA
- 09.20 O35 L. Faes and G. Nollo  
**Mixed Predictability and Cross-Validation to Assess Nonlinear Granger Causality in Short Cardiovascular Variability Series**  
Trento, Italy
- 09.35 O36 T. Buchner, G. Gielerak, M. Grzęda and J.J. Żebrowski  
**Cardiorespiratory Synchronization in States of Orthostatic Intolerance**  
Warszawa, Poland
- 09.50 O37 V.D.A. Corino, M. Mantica, F. Lombardi and L.T. Mainardi  
**Assessment of Spatial Organization in the Atria During Paroxysmal Atrial Fibrillation and Adrenergic Stimulation**  
Milan, Italy
- 10.05 O38 P. Jurak, J. Halamek, V.K. Sommers, J. Nykodym, D. Francis, L.C. Davies, P. Frana, M. Soucek and T. Kara  
**Blood Pressure and Heart Rate Phase Shift Variability During 0.1Hz Paced Breathing – Marker of Stability of Short-Term Circulation Control**  
Brno, Czech Republic
- 10.20 O39 P. Guzik, J. Piskorski, Jerzy Ellert, A. Wykretowicz and H. Wysocki  
**The Use of Decomposition of Poincaré Plots of Hemodynamic Data for Dynamic Monitoring of Cardiovascular Oscillations**  
Poznan, Poland
- 10.35 O40 J.W. Kantelhardt, A. Bauer, P. Barthel, R. Schneider, K. Hnatkova, H. Huikuri, M. Malik and G. Schmidt  
**Phase-Rectified Signal Averaging of ECG Detects Quasi-Periodicities and Predicts Mortality after Myocardial Infarction**  
Halle, Germany
- 10.50 O41 C.Q. Chang, W.C. Xu, Y.S. Hung and P.C.W. Fung  
**Nonlinear Dynamic Characterization of Intra-atrial ECG Signals**  
Hong Kong, Hong Kong

11.00-11.30 Coffee Break / Poster Session / Exhibition

**A. Aubert, A. Porta**

- 11.30 O42 X. L. Aubert and J. Muehlsteff  
**Non-Invasive Cuff-less Measurements of the Arterial Blood Pressure: What Does Pulse Transit-Time Tell Us All About?**  
Aachen, Germany
- 11.45 O43 G. Nollo, L. Faes, R. Cucino and A. Porta  
**Causal Coherence Analysis to Disclose Feedback and Feedforward Cardiovascular Regulatory Mechanisms in Humans**  
Trento, Italy
- 12.00 O44 M.F. Piepoli, D.P. Francis, M. Rauchhaus and P. Ponikowski  
**Abnormal Reflex Physiology is Linked to Reduced Skeletal Muscle Mass in Patients with Chronic Heart Failure**  
Piacenza, Italy
- 12.15 O45 B. Verheyden, F. Beckers, K. Couckuyt, J. Liu and A.E. Aubert  
**Transfer Function Analysis of Respiratory Oscillations to Determine Blood Pressure Control Before and After Spaceflight**  
Leuven, Belgium
- 12.30 O46 H. Schmidt, U. Mueller-Werdan, T. Hoffmann, D.P. Francis, M. F. Piepoli, M. Rauchhaus, R. Prondzinsky, H. Loppnow, M. Buerke, D. Hoyer and K. Werdan  
**Attenuated Autonomic Function in Multiple Organ Dysfunction Syndrome Across Three Age Groups**  
Halle, Germany
- 12.45 O47 S. Stojičić, S. Milutinović, O. Šarenac, S. Živković and N. Japundžić-Žigon  
**Central Vasopressin V1a and V1b Receptors Modulate the Cardiovascular Response to Air-jet Stress in Conscious Rats.**  
Belgrade, Serbia and Montenegro
- 13.00 O48 J. Krishnan, V.S. Chakravarthy, S. Radhakrishnan, V. Nayak and S. Victor  
**Role of Neural Feedback on Synchronizing Cardiac Oscillators**  
Madras, India

## Related Posters:

- P20 A.V. Martynenko, N. Yabluchansky, A. Yabluchansky, B. Verheyden, F. Beckers and A.E. Aubert  
**Nonlinear Analysis of RR and QT Variability for Cosmonauts Data**  
Kharkov, Ukraine
- P21 A.V. Martynenko, N. Yabluchansky, A. Yabluchansky, B. Verheyden, F. Beckers and A.E. Aubert  
**Stability Analysis of RR and QT Variability for Cosmonauts Data**  
Kharkov, Ukraine
- P22 D. Bajic, N. Japundzic-Zigon, C. Stefanovic, D. Vukobratovic, S. Milutinovic, O. Sarenac and S. Milosavljevic  
**Contribution of the Autonomic Nervous System to the Disorder in the Heart Rate and Blood Pressure Signals of Rats**  
Novi Sad, Serbia and Montenegro
- P23 P. Guzik, J. Piskorski, T. Krauze, A. Wykretowicz, H. Wysocki  
**Heart Rate Asymmetry by Poincare Plots of RR Intervals**  
Poznan, Poland
- P24 D. Cysarz, S. Lange and P. van Leeuwen  
**Is the Healthy Heartbeat Dynamics Simple or Complex?**  
Herdecke, Germany
- P25 P. Gąbka, P. Guzik, G. Kamieniarz and T. Krauze  
**Software for Simultaneous Analysis of Variability of Cardiovascular Signals and Baroreflex Sensitivity and its Application to Data from Healthy People**  
Poznan, Poland
- P26 M. Ferrario and M.G. Signorini  
**Evaluation of Lempel Ziv Complexity Index for the Analysis of Heart Rate Variability**  
Milano, Italy
- P27 F. Aletti, E. Lanzarone, M.L. Costantino and G. Baselli  
**Effects of Pulsatility on Apparent Peripheral Resistance with Edema**  
Milano, Italy
- P28 F. Braga and M.G. Signorini  
**Measurement of Respiratory Oscillations in the Single-Lead ECG Signal for Home-Monitoring Applications**  
Milano, Italy
- P29 E.J. Bowers and A. Murray  
**Phase Representing the Three Interactions Between Respiration, Changes in RR Intervals and Changes in SP Levels**  
Newcastle upon Tyne, United Kingdom

## 13.30-14.30 Closing Remarks / Lunch Break

15.00 Guided Tour Weimar

- O: Oral presentation  
P: Poster presentation (Monday 15, May, 2006 - Wednesday 17, May, 2006)

# Scientific Board of ESCGO 2006

**Akselrod, Solange**

Tel-Aviv University, Israel

**Aubert, Andre**

Catholic University Leuven, Belgium

**Bacharova, Ljuba**

International Laser Center Bratislava, Slovak Republic

**Bayes De Luna, Antoni**

Hospital Santa Creu i Sant Pau, Barcelona, Spain

**Caminal, Pere**

Technical University of Catalonia (UPC), Barcelona, Spain

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**Chon, Ki H.**

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**Coats, Andrew**

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**Dickhaus, Hartmut**

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**Doessel, Olaf**

University Karlsruhe, Germany

**Falcke, Martin**

Hahn-Meitner Institute, Berlin, Germany

**Figulla, Hans-Reiner**

Friedrich-Schiller-University Jena, Germany

**Honzikova, Natasa**

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**Hutten, Helmut**

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**Malik, Marek**

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**Malliani, Alberto**

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**Di Rienzo, Marco**

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**Schirdewan, Alexander**

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**Schmidt, Georg**

Deutsches Herzzentrum München, Germany

**Stein, Phyllis K.**

Washington University, School of Medicine, Washington, USA

**Swynghedauw, Bernard**

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**Van Leeuwen, Peter**

Department of Biomagnetism EFMT, Bochum, Germany

**Wessel, Niels**

University of Potsdam, Germany

**Yeragani, Vikram K.**

Wayne State University, School of Medicine, Detroit, USA

**Zebrowski, Jan**

Warsaw University of Technology, Poland

## Industrial Exhibition

**Biotronik Vertriebs GmbH** Berlin, Germany

**CNS Systems** Friedberg/Bayern, Germany

**Esaote Biomedica Deutschland GmbH** Neufahrn, Germany

**Fukuda Denshi Europe** Illnau, Swiss

**Heart Rhythm Instruments Inc.** Metuchen NJ, USA

**Huntleigh Healthcare, Cardiology Products Division** Wiesbaden, Germany

**medis Medizinische Messtechnik GmbH** Ilmenau, Germany

**MTM multitechmed GmbH** Huenfelden, Germany