9th meeting of
European
Study
Group on
Cardiovascular
Oscillations

# International Conference on Biological Oscillations

## April 10th-14th 2016 Lancaster, UK

**The aim** of the conference is to provide an interdisciplinary forum for discussions of biological oscillations between researchers drawn from areas such as physics, mathematics, engineering, computer science, cardiovascular regulation, neuroscience, time-series analysis, theory of nonlinear oscillatory dynamics, information processing, cardiovascular and microvascular physiology, cell biology and clinical sciences.

The International Conference on Biological Oscillations (9th meeting of ESGCO), will be held in Lancaster, UK from 10th April through 14th April 2016.
The conference will take place on campus in Lancaster University, a few miles from the beauty of the Lake District.

Abstract submission: Prospective authors are requested to submit a 2-page abstract including figures and references. The abstract must be prepared following the format of the templates available at:
**www.physics.ac.uk/ESGCO2016/submission**

Final paper publication: Selected works presented in the ESGCO-2016 conference will be published, after a peer-reviewed process, as regular papers in the *European Physical Journal* (Springer) and in *Physiological Measurement* (IOP).

Registration: The registration is now open on the conference website. For any query E-mail to:
**esgco2016@lancaster.ac.uk**

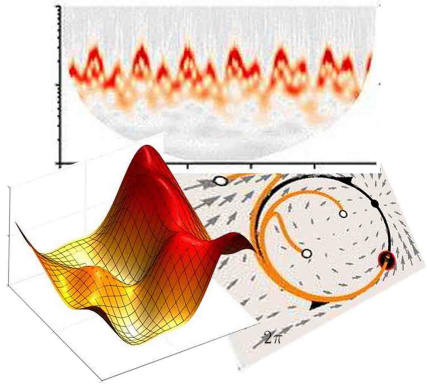
### Important dates

Conference: *10-14 April 2016*
Early bird registration: *1 February 2016*
Abstract submission: *1 March 2016*

**Why and how to study biological oscillations?**
**www.physics.lancs.ac.uk/ESGCO2016**

### Topics include:

- Methods for analysis of cardiovascular signals at all levels of complexity
- Novel methods for recording cardiovascular and related biological oscillations
- Interactions, couplings and how to detect them
- Entropy and information from biological oscillations
- Phase dynamics for capturing biological oscillations
- Physiological and biological interpretations of oscillations
- Brain connectivity and methods to study connectivity
- Cardiovascular-brain interactions
- Oscillations of microvascular flow and blood flow oxygenation
- Calcium oscillations and oscillations of vascular endothelial activity
- Metabolic oscillations at cellular level
- Changes in cardiovascular & brain oscillations & waves in anæsthesia, coma and with ageing
- Cardiovascular, metabolic, and endocrine dysfunctions of oscillations and their couplings
- Oscillations in wounds and malignant tissues
- Heart rate variability, blood pressure variability and hypertension, and other applications



**For special sessions see: www.physics.ac.uk/ESGCO2016/specials**

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