

# QuEBS 2013 -

## Quantum Effects in Biological Systems Workshop

**Campus Vienna BioCenter, Vienna, Austria, June 29<sup>th</sup> - July 3<sup>rd</sup> 2013**

**Organizer: Alipasha Vaziri**  
**Local Coordination: Robert Prevedel**

**Website: <http://quebs-2013.imp.ac.at>**

*Abstract deadline: April 15<sup>th</sup>, 2013*

*Early-bird Registration deadline: May 15<sup>th</sup>, 2013*

*Standard Registration deadline: June 15<sup>th</sup>, 2013*

Welcome to the fifth Quantum Effects in Biological Systems workshop. As in the previous years the meeting will cover the latest developments on quantum phenomena in biological systems and chemical structures central to life. The meeting will be held at the Bio Center Campus in Vienna, Austria. By choosing this venue, we intend to bring together the international experts in this emerging field with biologists and researchers working on the development of new bio-sensing and probing techniques. By this format we intend to further engage the biology community and provide a stimulating environment for physicists and chemists to discover potential new areas where quantum effects might be at work in biological systems.

The meeting will consist of a mix of keynote, invited (40+5 min) and contributed (20+5 min) presentations as well as a poster session covering a variety of topics including:

- (1) Energy and charge transfer in photosynthetic light harvesting
- (2) Recent and emerging systems (Magnetoreception, olfaction, channels and pumps, ...)
- (3) Quantum tunneling phenomena in chemical and biological systems
- (4) Emerging techniques for quantum biology
- (5) Quantum techniques for biological research

### **Confirmed Invited Speakers:**

**Anton Zeilinger** (*Keynote*) – *University of Vienna & IQOQI*

**Markus Arndt** *University of Vienna*

**Alan Aspuru-Guzik** *Harvard University*

**Hans Briegel** *University of Innsbruck*

**Greg Engel** *University of Chicago*

**Joachim Heberle** *Freie Universität Berlin*

**Peter Hore** *University of Oxford*

**Susana Huelga** *University of Ulm*

**David Keays** *Institute of Molecular Pathology*

**Philipp Kukura** *University of Oxford*

**Massimo Olivucci** *Univ. di Siena & Bowling Green State Univ.*

**Masoud Mohseni** *MIT & BBN Technologies*

**Henrik Mouritsen** *University of Oldenburg*

**Yasser Omar** *Technical University of Lisbon*

**Martin Plenio** *University of Ulm*

**Markus Raschke** *University of Colorado*

**Arno Rauschenbeutel** *Vienna University of Technology*

**Makis Skoulakis** *Alexander Fleming Research Center*

**Jörg Wrachtrup** *University of Stuttgart*

**Birgitta Whaley** *University of California, Berkeley*

**Fred Wolf** *Max Planck Institute for Dynamics and Self-Organization*