

**COST Action MP1209 “Thermodynamics in the Quantum Regime” Newsletter  
Friday 5<sup>th</sup> December 2014**

\*\*\*\*\*

**Contents**

\*\*\*\*\*

- Forthcoming Events
- STSM
- Website
- eCOST
- New members
- Future network events
- Administrative Information
- COST Acknowledged Publications

\*\*\*\*\*

**Forthcoming Events**

\*\*\*\*\*

**COST MP1209 Training School - “Physics of Small Quantum Systems: Thermal and Topological Phenomena”** is being organized by Tero Heikkilä and will be held from 12-16 January 2015 in Gustavelund, Tuusula, Finland. The meeting website is <https://www.jyu.fi/fysiikka/en/qutschool2015> - **registration closes on 14<sup>th</sup> December.**

It is intended to be a graduate training school for physicists working on topological properties, and nonequilibrium and thermodynamic phenomena in small condensed-matter systems. Topics will include: Quantum thermodynamics, (circuit) optomechanics, topological superconductors, thermal effects in ultracold atom systems, and fast (radio frequency) measurements, including connections between these topics.

**COSTMP1209 – The Second Quantum Thermodynamics Conference** is being organised by Roberta Zambrini and will be held from 19-24 April 2015 in Palma de Mallorca, Spain, hosted by the Institute of Cross-Disciplinary Physics and Complex Systems **IFISC**, a joint research Institute of the University of Balearic Islands **UIB** and the Spanish National Research Council **CSIC**. **The meeting website is now available -** <http://ifisc.uib-csic.es/qtd2/>

The 2nd Quantum Thermodynamics Conference is meant to be a reference for researchers working in thermodynamics in the quantum regime, in connection with quantum information theory and statistical physics. Two keynote (Martin Plenio and Peter Talkner), several invited and contributed talks as well as a poster section are scheduled, promoting young scientists. The conference also includes discussion time and Working Group meetings.

**Workshop on Quantum Information and Thermodynamics**

23-27 February 2015, Sao Paulo, Brazil  
<http://wqit-quantum.if.ufg.br/>

**Workshop on Thermodynamics and Nonlinear Dynamics in the Information Age**

13-17 July 2015, Telluride, USA  
<https://www.telluridescience.org/meetings/workshop-details?wid=548>

**COSTMP1209 – Third Quantum Thermodynamics Conference "Quantum Thermodynamics, Quantum Information"**

11-16 October 2015, Porquerolles, France

The meeting website will be available soon.

\*\*\*\*\*

**STSM**

\*\*\*\*\*

The 7<sup>th</sup> STSM call is now open and applications must be received by 17<sup>th</sup> December.

Details can be found on the website - <http://qut.ethz.ch/stsm>.

The budget is €3500 and we are hoping to fund 4 or 5 STSMs from this.

STSMs are especially meant for young researchers, including PhD students. We particularly encourage female PhD students (who are currently under represented in STSMs that have been awarded) to apply.

STSM applications are a competitive process so, if you are considering applying, please give yourself the best chance of success by ensuring your project description is as strong as possible.

\*\*\*\*\*

**Website**

\*\*\*\*\*

All the member information that we have is now on the COSTMP1209 website -

<http://qut.ethz.ch/members2/all-members>.

Please check your entry and let me know if any information needs updating.

If your entry doesn't have a photo, please email me one and I will upload it to the website.

\*\*\*\*\*

**eCOST**

\*\*\*\*\*

If you have an online COST (eCOST) profile and have changed address, institution, bank account etc please log on to eCOST and update your profile. Keeping this information up to date helps ensure reimbursements are made quickly.

\*\*\*\*\*

**New Members**

\*\*\*\*\*

9 new members have joined the network since the last newsletter.

\*\*\*\*\*

**Future Network Events**

\*\*\*\*\*

We are now inviting applications from network members to organize and host events to be held during the third and fourth years of the network. A separate email has been sent out to all members today detailing the events required and how to apply.

\*\*\*\*\*

**Administrative Information**

\*\*\*\*\*

Please send any items for inclusion in the next newsletter to me -  
[costmp1209@gmail.com](mailto:costmp1209@gmail.com).

\*\*\*\*\*

**COST Acknowledged Publications**

\*\*\*\*\*

Publications acknowledging COST are listed on our website -  
<http://qut.ethz.ch/resources/publications>.

The following COST acknowledged publications have been notified to us since the last newsletter. Please send details of any new COST acknowledged publications to [costmp1209@gmail.com](mailto:costmp1209@gmail.com).

1. Frenzel, M. F., Jennings, D. & Rudolph, T. Reexamination of pure qubit work extraction. *Phys. Rev. E* **90**, 052136 (2014).

Kind regards,

Marion