

# NiPS Summer School 2011

August 1-6

Perugia (Italy)

Summer School: "Energy Harvesting at micro and nanoscale"

Workshop: "Energy management at micro and nanoscale"



**NiPS** Laboratory  
Noise in Physical Systems



The Noise in Physical System Laboratory organizes the second edition of **NiPS Summer School** devoted to "Energy Harvesting at micro and nanoscale" and the **Workshop** "Energy management at micro and nanoscale".

The school, supported by the EC Fet Proactive project NANOPOWER and by the Coordination and Support Action ZEROPOWER, is open to graduate students, post-docs, young researchers, and in general to all scientists interested in the physical foundations and practical applications of energy harvesting at micro and nanoscale. As part of the school there is a two days workshop where the students and external participants can present the result of their research. The workshop covers a wider range of subjects under the title of "Energy management at micro and nanoscale" and is open to contributions.

## Topics

- Introduction to energy harvesting (EH)
- Linear and non-linear vibration harvesting
- Thermoelectric efficiency
- Noise rectification
- Phonon engineering for EH
- MEMS/NEMS design and realization
- Micro/Nano devices for EH
- ICT applications of EH
- Future technological trends: beyond CMOS technology and energy efficiency

## General Program

Aug. 1:	
13.00-14.30	Welcome Lunch
15.00	Presentation
15.30 -18.30	Lectures
Aug. 2- Aug. 3:	Lectures
Aug. 4:	
9.00-13.00	Lectures
15.00 - 19.00	Workshop
Aug. 5:	Workshop
20.30	Gala dinner
Aug. 6:	Departure

## Scientific Director

Luca Gammaitoni  
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For information and registration  
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