



# SEMINARANKÜNDIGUNG

**Dienstag, 18. Januar 2011**

**17:15 Uhr**

**ZNN, Seminarraum**

## **„Silicon photonics: A new technology platform to enable low cost and high performance photonics”**

Silicon photonics allows you to integrate thousands of photonic devices in a few cm square which are able to transmit signal over long distances at high speed, optical networks which handle tens of channels and route them all across an electronic chip, an entire bio-lab with the size of a nail or solar cells with conversion efficiency beyond the thermodynamic limit of silicon cells. These are all examples where the silicon photonics paradigm has shown all its potential. In the talk the basic and state of the art of silicon photonics will be discussed together with the relevance of silicon nanophotonics to widen its application.

**Prof. Lorenzo Pavesi**

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