

## OMT

Wed, 2017-03-01 11:05 - [OMT - ETN](#) **Full Name:** Optomechanical Technologies

**Coordinator:** EPFL / Prof. Tobias J. Kippenberg

**Website:**

[www.omt-etn.net](http://www.omt-etn.net)

**Running time:** 2016-10-01 - 2020-09-30

### **A H2020 Marie Curie Skłodowska - European Training Network (ETN) coordinated by EPFL**

OMT is a Marie Curie collaborative research and training network focused on exploring new applications of Optomechanical Technologies (OMT), which brings together 14 EU partners, including IBM and Bosch. OMT kicked off on 1st October 2016, offering 15 PhD students (early-stage researchers) the opportunity to join leading research groups and participate in competitive experiments.

A series of innovative workshops, secondments and access to state-of-the art technology facilities at partner institutions will prepare PhD students for top-quality academic research and provide a platform to interact with high-profile industry partners. OMT will therefore benefit students with a valuable set of skills that extend traditional PhD training, preparing them to join the competitive ranks of academia and industry and enhancing career prospects in Europe and beyond.

### **Optomechanical Technologies - Research Description**

Nano- and micromechanical oscillators are in our modern information age indispensable technologies that enable navigation, timing, motional sensing and wireless communication and are found in any modern cell phone, plane or car.

The ETN research focuses on optomechanical technologies (OMT) – new technologies based on cavity optomechanical interactions that allow to read out and control mechanical oscillators at the quantum level using optical fields.

This ETN seeks to advance the state of the art and make novel contributions to the field by focusing on entirely new applications of optomechanical technologies by specifically exploring new frontiers:

- Chip-scale microwave to optical conversion schemes
- Dissipative optomechanical systems for low noise amplification and novel non-reciprocal microwave components
- Optomechanical devices with novel 2D materials
- Making optomechanical systems practical, bridging the gap from research to market

**OMT consortium:** EPFL (coordinator), University of Copenhagen, University of Erlangen-Nuremberg, Aalto University, University of Camerino, University Pierre and Marie Curie, University of Vienna, University of Hamburg, CNRS, University of Konstanz, Ghent University, Delft University of Technology, IBM Research GmbH (Zurich), Robert Bosch GmbH

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## OMT

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