



MOHAMMAD ALI KHALIGHI

From France to Sweden



Project: **Radiofrequency and optical wireless communications**

Research topic: **Physics**

Swedish Institution: **KTH Royal Institute of Technology / Linköping University**

French Institution: **Ecole Centrale Marseille**

Dates of mobility: **28/05/2016 to 04/06/2016**

Program: **SFVE-A (ex-TOR)**



PRESENTATION

[Mohammad Ali Khalighi](#) is Assc. Prof. at the [Ecole Centrale Marseille](#) and Researcher at the [Institut Fresnel lab](#). He obtained his PhD in Signal-Image-Speech-Telecommunications from the [Institut National Polytechnique Grenoble](#) in 2003 and was habilitated in 2014 at [Aix-Marseille University](#). He conducts research in Optical Wireless Communications (OWCs) in free-space, visible light and underwater, and is also interested in RF Wireless Communications such as wireless sensor networks and its AI applications.

ACTIVITIES IN SWEDEN

Prof. Khalighi started his mobility by visiting the [Communication Systems lab](#) at the Electrical Engineering Department (ISY) of [Linköping University](#). There, he met with [Prof. Erik Larsson](#), one of the pioneers of 5G transmission networks, and Dr. Julia Vinogradova. He held a seminar entitled “Optical Wireless Communications: A Pertinent Complementary Technology to RF in Indoor and Outdoor Applications”. Future collaborations were envisaged. He also visited the Mobile Telecommunications team at the [Laboratory of Communication and Transport Systems](#) at the [Department of Science and Technology](#) of [Campus Norrköping](#), where he met with [Dr. Vangelis Angelakis](#) and [Dr. Valentin Polishchuk](#). They discussed wireless optical communications and problems of numerical transmissions in transport systems. Khalighi held a second seminar entitled “Visible Light Communications: Allowing Unprecedentedly High Data Rates in Indoor and Underwater Applications”. Subsequently, he visited [KTH Kista](#), situated in one of the world’s most important ICT clusters. He visited the [Communication Systems Division](#) and the research teams on Radio Systems (RSLAB) and Optical Networks ([ONLAB](#)). He met [Prof. Jens Zander](#), who works on system design aspects and high transmission protocol layers. He held a third seminar entitled “Visible-light and Infrared Communications: Attempts to Address RF Spectrum Congestion”. He had discussions with [Dr. Slimane Ben Slimane](#), [Assc. Prof. Cicek Cavdar](#), [Dr. Ki Won Sung](#), [Dr. Laetitia Falconetti \(Ericsson\)](#), and [Prof. Lena Wosinska](#) and [Dr. Marija Furdek](#), now at [Chalmers](#).