



**MATHIEU LINARES**

*From Sweden to France*



Project: **Chiroptical spectroscopy**

Research topic: **Informatics**

Swedish Institution: **KTH Royal Institute of Technology**

French Institution: **University of Angers / University of Rennes**

Dates of mobility: **01/06/2017 to 18/06/2017**

Program: **SFVE-A (ex-FRÖ)**



## PRESENTATION

[Mathieu Linares](#) is a Researcher in Engineering at the supercomputer center [PDC](#) at [KTH](#) Royal Institute of Technology. His main research interests include Modeling of organic electronics (Kinetic Monte-Carlo simulations), modeling of self-assembly in solution and on surface (MM and MD), and calculation of Electronic Circular Dichroism in single molecule and stacks (semi-empirical and TD-DFT). He obtained his PhD in Computational Chemistry in 2005 from the [University Paul Cézanne](#).

## ACTIVITIES IN FRANCE

Mathieu Linares started his mobility by meeting with [Dr. Narcis Avarvari](#), Director of Research at the French National Centre for Scientific Research ([CNRS](#)) and his team, composed by [Kévin Martin](#) and Christiana Oliveira, at the [University of Angers](#). Linares and Avarvari have collaborated for many years and resumed discussions to improve knowledge about chiral self-assembly mechanisms for molecules with C<sub>2</sub> (180°) or C<sub>3</sub> (120°) symmetries.

He also attended the [16<sup>th</sup> Conference on Chiroptical Spectroscopy](#), where he had the opportunity to meet the (international) community working on chirality issues, among others the event's organiser [Dr. Jeanne Crassous](#) (also CNRS Director of Research) and [Dr. Sylvain Gaillard](#), Assc. Prof. at the National Graduate School of Engineering and Research Center of Caen ([ENSICAEN](#)). Gaillard and Linares work jointly on an Organic Light Emitting Diode (OLED) and Light Electrochemical Cell (LEC) project to modify the molecular complexes to improve emission properties.

Linares held a seminar at the [Laboratory Moltech Anjou](#) of the University of Angers entitled "(Chir)optical properties of probes in their biological environment" in front of about 60 attendees, a presentation during the Chiroptical Spectroscopy conference entitled "Electronic Circular dichroism to reveal DNA-probe interactions" attended by around 150-200 people, and another seminar entitled "Absorption and emission of CU-NHC-DPA complexes" attended by 6 students and senior staff.