



MARIE PLAZANET

From France to Sweden



Project: **Relaxation dynamics in soft condensed matter**

Research topic: **Physics**

Swedish Institution: **European Spallation Source Lund / Max-IV**

French Institution: **University Grenoble Alpes**

Dates of mobility: **24/08/2016 to 27/08/2016**

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



PRESENTATION

[Marie Plazanet](#) is a Researcher at the Interdisciplinary Laboratory of Physics ([LIPhy](#)) at the [University Grenoble-Alpes](#) (UGA). She conducts research in Physical Chemistry, Spectroscopy and Molecular Physics. She obtained her PhD in Physics from UGA (ex-University Joseph Fourier) in 2000.

ACTIVITIES IN SWEDEN

Marie Plazanet is using neutron scattering in her research and is involved in the French Neutron Scattering Association ([SFN](#)), and was thus keen on visiting the new European Spallation Source ([EES](#)) facility in Lund. The ESS is a superconducting linear proton gas pedal known as a "Linac". Accelerated protons strike a tungsten target. The nuclear reaction known as spallation produces neutrons focused into beams. A beam of neutrons is directed towards an "instrument", where it passes through the sample under study and is "scattered" by it. The data obtained from the neutron scattering instruments can be used to deduce the structure and dynamics of the sample material, from the microscopic to the atomic scale. Read more about the project [here](#).

She discussed the organization of EES with [Arno Hiess](#), [Monica Hartl](#) and [Ken Andersen](#). She held a seminar entitled "Confinement and entropic effects on the phase diagram of electrolyte: the case of water confined in Nafion membrane". Discussions ensued on chemical deuteration with [Zoe Fischer](#) and [Anna Leung](#).

Plazanet also had the chance to inspect the ESS division of Data Management and Software Center ([DMSC](#)) in Copenhagen, where she also met many Swedish and Danish scientists involved in neutron scattering and the [Swedish Research Council](#). She then returned to Lund and received a full tour of the new [synchrotron laboratory](#) at [Max-IV](#), where she was hosted by [Gerardina Carbone](#) ([Lund University](#)).