

## Poster Presentation

**MS84.P09**

### *Teaching crystallography and material science focusing on large scale facilities*

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Modern crystallography makes intense use of large scale facilities: neutron reactors, synchrotron sources, free electron lasers, where sources, optics and detectors allow for a wide range of possible experiments putting forwards the limits of the analysis of the structure and dynamics of matter and materials. Giving the large scale facilities a major role in the teaching of crystallography and material science, allowing for intense practice, requires to gather different skills which is more often done through summer school or intensive programs at PhD or junior scientist level. The Erasmus Mundus Master Course MaMaSELF (Master in Material Science Exploring Large Scale Facilities) is a unique European master program focused on the use of large scale facilities to investigate intimate nature of matter and materials where the five consortium higher education institutions (University of Rennes 1, France; Technische Universität München and Ludwig Maximilian University in München, Germany; University of Torino, Italy and University of Montpellier 2, France) have managed, together with Large Scale Facilities partners (ESRF, ILL, FRMII, DESY, LLB, SOLEIL, PSI) and third country partners spread out all over the world (Brazil, India, Japan, Russia, Switzerland , USA), to offer to the students a two years program at the master level including large amount of crystallography and spectroscopy teaching and an intensive summer-school totally dedicated to large scale facilities and including a large proportion of lessons and labs taught by experts, as well as many internship and master thesis opportunities at the large scale facilities.

[1] <http://www.mamaself.eu/english/>, [2] <http://application.mamaself.eu/>

**Keywords:** Large Scale Facilities, Material Science