



Horizon 2020 - Marie Skłodowska-Curie Actions
Innovative Training Network (ITN)
Complex Rheologies in Earth dynamics and industrial Processes

SUMMER SCHOOL

« **Thermal convection in complex fluids:
from laboratory to mantle dynamics** »

ORSAY, 12 – 16 September 2016

Location : *Laboratoire FAST (CNRS / Univ. P-Sud)*

Courses : 23 Rue Jean Rostand, Parc d'affaires du Campus Universitaire

Practicals : Batiment 502, Rue André Rivière,

Campus Universitaire

91405 ORSAY cedex

NB : The two locations are about 200 meters from one another



To get there from Paris : take the RER B, direction Saint-Remy-les-Chevreuse ; Stop at Le Guichet. Exit at the head of the train. The Hôtel d'Orsay is within 3 mns walking from the station. FAST is at 15 mns walking (uphill) from the hôtel. See the map.

Material to bring with you :

A laptop (with adapters when required –220 V/EU plugs are used in France) with installed :

- Matlab
- PIVlab tool : <http://www.mathworks.com/matlabcentral/fileexchange/27659-pivlab-time-resolved-particle-image-velocimetry--piv--tool>

Organisazing Comittee :

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Mai Guerrib, Monique Sainte-Rose
Valerio Acocella, Silvia Brizzi, Fabio Corbi, Agnes Kiraly, Daniele Trippanera*

Monday 12 September

8h45 Registration

9h00. Introduction (Anne Davaille, FAST)

9h15. Scaling Analysis I (Neil Ribe, FAST)

11h15. PAUSE

11h30. Introduction to Rheometry (Anne Davaille)

12.30 LUNCH (Restaurant du Personnel U-Psud)

14.00 Scaling Analysis II (Neil Ribe, FAST)

15.30 -18h30: Visualization techniques
(Francesca Funiciello & Agnes Kiraly, Roma III ; Anne Davaille, FAST)

Tuesday 13 September

9h00-13h00: LAB 1

Laboratory Practicals (in small groups)

- 1- Rheology + Volcano-Tectonics
- 2- Subduction
- 3- Plumes
- 4- Convection

13h00 : LUNCH

14h30-18h30 : LAB 2

Wednesday 14 September

8h30. Multi-scale Convection in Planetary Interiors
(Anne Davaille, FAST)

10h30 PAUSE

10h45. Volcano-Tectonics (Valerio Acocella, Roma III)

12h45. LUNCH

14h-18h00 : LAB 3

Thursday 15 September

8h30. Subduction

(Francesca Funicello, Roma III ; Neil Ribe, FAST)

11h30. LUNCH

13h00-17h00 : LAB 4

17h00-18h00 : Visit of FAST labs