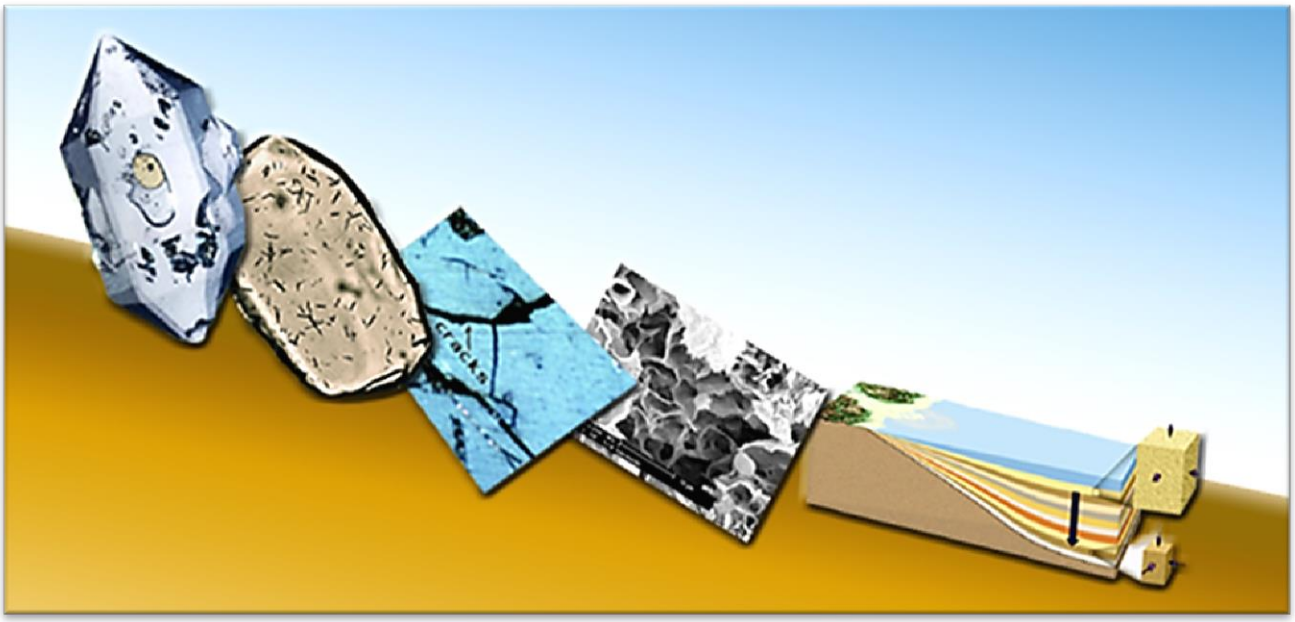
institute for advanced studies
university of Cergy-Pontoise

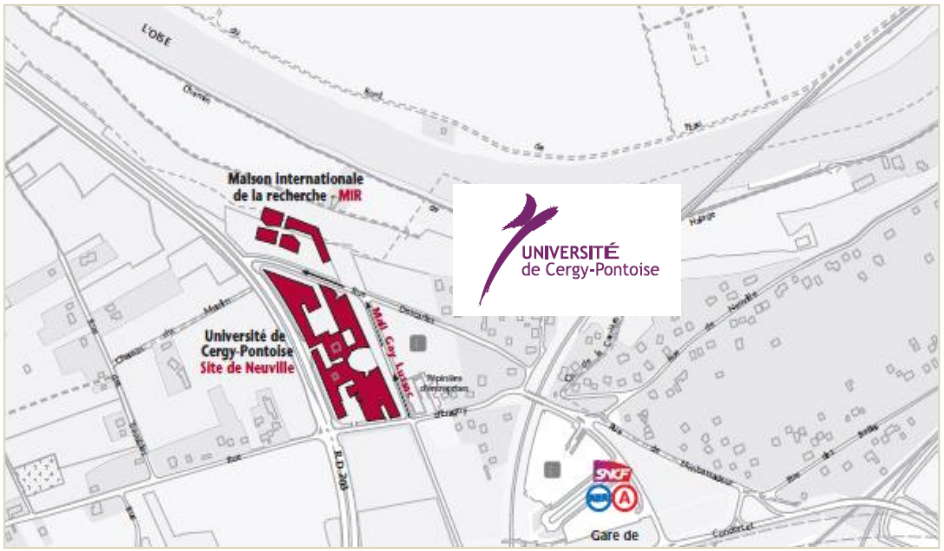
Géosciences franciliennes GIS

Invite you to

the Workshop on "Thermal evolution of sedimentary basins: Principles, tools and applications to convergent and extensional settings"

Day 1 - January 18th, 2018





WHERE: *Maison internationale de la recherche*
rue Descartes (anciennement chemin de la princesse) 95000 Neuville-sur-Oise

WHEN: *January 18th 2018*
h 8:30 a.m - 4:30 p.m.

TO APPLY *Send an e-mail to sveva.corrado@uniroma3.it by January 8th, 2017*

UNIVERSITÉ de Cergy-Pontoise

ROMA TRE UNIVERSITÀ DEGLI STUDI

Rationale of the Workshop

The reconstruction of thermal evolution in sedimentary basins is by far a complex issue and requires knowledge on the tectonostratigraphic evolution of the basin, the present and past heat flows, the thermal conductivity and porosity of the rocks, among other inputs.

The classical approaches used to reconstruct past temperatures in sedimentary basins are traditionally based on the numerical basin modeling and the direct measurement of paleo-temperatures on natural rock samples by means of thermometric methods. The two approaches are complementary and the common practice consists in calibrating the modeled thermal histories with constraints derived from LT thermometry and thermo-chronometry data. This classical procedure is generally robust but may suffer some limitations when applied to various geodynamic settings. New cutting edge analytical and modelling approaches developed in the last years can help to integrate reconstructions in these case histories.

Aim of this workshop will be to provide a wideangle perspective to approach the reconstruction of thermal evolution of sedimentary basins. It is mainly addressed to PhD and Post-Docs of the Ile de France.

It will be organised in two working days that will be held at the Maison Internationale de la Recherche of the University of Cergy Pontoise.

The first day (**January 18th, 2018** will consist of five 40min lectures to introduce young researches to the principles of Basin Analysis and the most widespread and/or the newest tools necessary to build reliable scenarios of thermal evolution in sedimentary basins.

The second day will take place in Fall 2018 and will be mainly devoted to the presentation of case histories all over the world in both compressinal and extensional geodynamic settings.

The active partecipantion of PhD students and Post-Docs is warmly encouraged with the presentation of posters of their research activities (width 80 cm x lenght 180 cm) during the workshop, (but this is not compulsory to attend the event). There will be time to share contents and ideas with other students and researchers.

To apply please send an e-mail to sveva.corrado@uniroma3.it by January 8th, 2018.

ias institute for advanced studies
university of Cergy-Pontoise

Géosciences franciliennes GIS

Programme of the first day (January 18th, 2018)

h 8:30 Registration

h 9:00 Welcome and Introduction to the workshop
Dominique Frizon de Lamotte (Université de Cergy Pontoise)

h 9:15 Building an integrated platform for the thermal evolution of sedimentary basins: from traditional to innovative methodological approaches
Sveva Corrado (Università "Roma Tre" Italy - Université de Cergy Pontoise)

h 9:55 Contribution of carbonate diagenesis to thermicity and barometry appraisal in sedimentary basins
Marta Gasparrini (IFP energies nouvelles)

h 10:35 Coffee break

h 10:55 Low T thermochrology in sedimentary basins
Jocelyn Barbarand (Univ Paris Sud)

h 11:35 Question and Answer session

h 11:50 Poster session with short presentations of PhD students, Post-docs and young Researchers

h 12:20 Lunch

h 13:40 Geochemical constrain on the thermal history reconstruction: example for the Paleozoic in Algeria/Morocco
Françoise Béhar (Total)

h 14:20 New perspective in thermal modelling of sedimentary basins
Jean Luc Rudkiewicz (IFP energies nouvelles)

h 15:00 Discussion, open issues and presentation of the second day workshop (to be held in Cergy-Pontoise University in Fall 2018)

h 15:40 Poster session with short presentations of PhD students, Post-docs and young Researchers, visit of the Technology Platform Microscopie et analyse of Cergy Pontoise University

h 16:15 Final remarks and Closure of the workshop

UNIVERSITÉ de Cergy-Pontoise

ROMA TRE UNIVERSITÀ DEGLI STUDI