



ENIGMA ITN Meeting n°5

07/02/2019, Barcelona

Coordinator's report:

Training and Tutoring Committee 10'



This project has received funding from European Union's Horizon 2020 research and innovation programme under the Marie Skłodowska-Curie Grant Agreement N°722028.

- I. Composition
- II. Role
- III. Training implementation in ENIGMA
- IV. Deliverables & Milestones (see management meeting)



Training and Tutoring Committee composition

- Frédéric Nguyen (by default WP Training leader)
- Jan Fleckenstein (by default WP Training leader)
- Majken Looms Zibar(CPH)
- Caroline Darcel (ITASCA)
- Philip Brunner (UNINE)
- Maria Pool (CSIC)
- Olaf Cirpka (UT)
- Damien Jougnot (CNRS)
- Sander Huisman (FZJ)



II. Roles



ITN Enigma



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Training and Tutoring Committee role

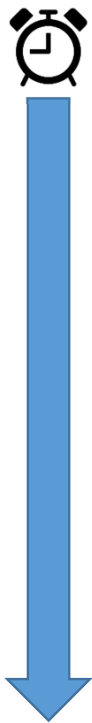
1. Ensures a continuous monitoring of the fellow's progresses and steer the fellow's tasks plan **if required by ESR (*Early Stage Researchers*) supervisors, and Training and Tutoring Committee**
2. **Sets up and organizes network wide training events**, performs and summarizes training needs assessment
3. Follows the **personal career development plan** for the trainees



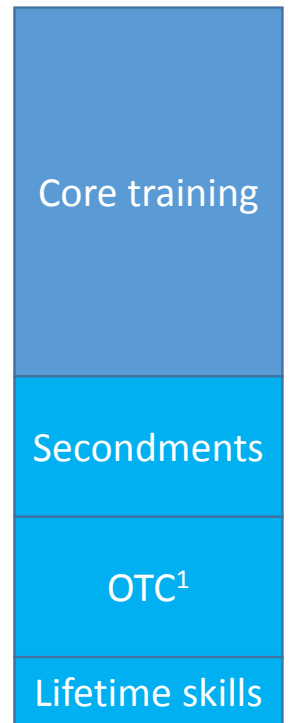
III. Training implementation in ENIGMA



Progressive training



- **Core training**
 - In-situ imaging and modeling of complex media; understanding of subsurface flow and transport dynamics ([Workshops, Summer School and phd courses](#))
- **Secondments**
 - Selected institutions/industry.
- **Lifetime skills and career plan**
 - ESRs career development.



Contribution from the academic and non-academic sector

¹ Optional training courses

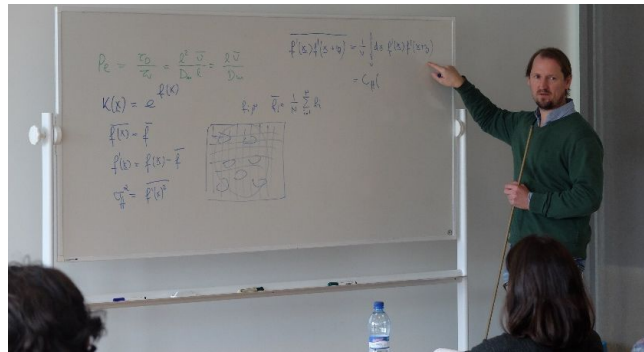


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Core training: Progressive training from field to models



Field & methods

Theory and modeling

Sensing and modeling



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Workshops & Summer school content

Workshops

- [WS1](#): Advanced subsurface characterization methods: theory and field practice (09 October to 13 October 2017, ULiege & FZJ)
- [WS2](#): Multi-scale investigation of fractured media (16 October to 20 October 2017, CNRS Rennes)
- [WS3](#): Predictive modeling and upscaling of flow and reactive transport in heterogeneous aquifers (06 February to 08 February, CSIC, UT & UNIL)
- [WS4](#): Advanced inverse modeling and stochastic representations of heterogeneous porous and fractured media (12 February to 15 February, UNIL & UNINE)
- [WS5](#): This week : lifetime skills

Summer school

- Sensing and modelling of flow and transport process dynamics in heterogeneous subsurface environments (25 June to 06 July 2018)



Example of ESR15 Jorge

ENIGMA

Workshops

Summer school

Secondments (to come) :

- at UGent for Bayesian Evidential Learning
- at AQUALE for inter-sectoral reality check

Optional Training Courses

Sensitivity Analysis and Uncertainty Analysis workshop (UCL, Belgium-6/11/2017)

Modelling GPR and using gprMax workshop (FZJ, Germany-29/11/2017 and 12/01/2018)

Reconstructing real-system dynamics from time series records workshop (UCL, Belgium-29/10/2018)

French language courses.



Individual ESR students monitoring

- At network scale, **through presentation of their work at each ENIGMA meetings;**
- **Progress reports** included in the ENIGMA network reports ([months 12, 24, 36, 42](#));
- **A formal presentation, during a poster session, by ESRs to external members from the **Advisory Board**, was organized during the Cargèse Summer School**



Personal Training and Career Development Plan (PTCDP)

- **Why ?** : Monitoring ESR progress and professional development
- **Who ?** : The local supervisor and mentor will prepare a PTCDP (Career Development Plan) in coordination with training and tutoring committee
- **When ?** : The PTCDP plan will be updated on a yearly basis and summarized with objectives, milestones and deliverables ([M12¹](#), [M24¹](#), [M40²](#)).

¹ Training Needs Assessment Plan (UCPH)

² Career Development Plan (ULg)

