

LECTURERS

Prof. Marco Paggi, IMT School for Advanced Studies Lucca, Italy.

1 Lecture: Open problems in mechanics of heterogeneous materials

2 Lectures: Overview on funding opportunities

1 Lecture: How to write a research proposal

Prof. Alberto Sapora, Politecnico di Torino, Italy

2 Lectures: Crack onset prediction (circular holes/ V-notches)

1 Lecture: Fatigue failure: cracks and notch sensitivity

Dr. Francesco Biancalani, IMT School for Advanced Studies Lucca, Italy

1 Lecture: Start-ups and spin-offs, business plans

1 Lecture: Incubators and accelerators

Dr. Maria Rosaria Marulli, IMT School for Advanced Studies Lucca, Italy

1 Lecture: Fracture mechanics of joints

Prof. Zohar Yosibash, Tel Aviv University, Israel

2 Lectures: Advanced numerical modeling of failure processes

3 Lectures: Effective communication & presentations

Prof. Dominique Leguillon Sorbonne Université, France

2 Lectures: Multiscale modelling

Prof. Sofia Mogilevskaya, University of Minnesota, USA

1 Lecture: Homogenization methods

1 Lecture: Modelling and simulation of heterogeneous materials

REGISTRATION & PARTICIPATION

PRO Winter School is focused on doctoral students in Fracture Mechanics. It is open to highly motivated students outside the NewFrac project as well.

Application for participation is required by filling the following application form [HERE](#). **Application deadline 23/12/2021.**

Registration fees: 300 €. Including coffee breaks, lunches and the social dinner.

Discounted participation fees will apply in case of on-line participation due to COVID situation.

A message of confirmation along with detailed instructions will be sent to participant's e-mails provided by January 14th.

To obtain a certificate of having passed the CORE school requires:

- Assistance to at least 85% of the lectures
- Achieve at least 50% in the multiple-choice final test

CONTENT

Expert knowledge

Advanced modelling techniques for heterogeneous materials and their failure behavior.

Academic training

- Data Management
- Presentation skills
- Start-ups & spin-offs
- Open innovation

Professional skills

- Gender issues in research & innovation
- Self-management
- Intellectual property rights & business plans

PRO Winter School

February 7th to 11th, 2022

Lucca, Italy



Chairman:


Prof. Marco Paggi
IMT School Lucca, Italy

Secretary:

Ing. Ninfa Vital
Universidad de Sevilla, Spain
info@newfrac.eu

For further information visit:

<https://www.newfrac.eu/>



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SCHEDULE

Mon Feb 7	Tue Feb 8	Wed Feb 9	Thr Feb 10	Fri Feb 11
09:00 - 09:30 Opening address		09:00 - 10:00 Incubators and accelerators <i>Francesco Biancalani</i>		
09:30 - 10:45 Open problems in mechanics of heterogeneous materials <i>Marco Paggi</i>	9:00 - 10:45 Overview on funding opportunities <i>Marco Paggi</i>		09:00 - 10:45 Advanced numerical modeling of failure processes <i>Zohar Yosibash</i>	09:00 - 10:45 Effective communication & presentations <i>Zohar Yosibash</i>
Coffee break	Coffee break	10:30-12:30 Visit to the technological pole of Lucca <i>Nico Cerri and Marco Paggi</i>	Coffee break	Coffee break
11:15 - 13:00 Circular holes <i>Alberto Sapora</i>	11:15 - 13:00 Start-ups and spin-offs, business plans <i>Francesco Biancalani</i>		11:15 - 13:00 Multiscale modelling <i>Dominique Leguillon</i>	11:15 - 13:00 Homogenization methods <i>Sofia Mogilevskaya</i>
Lunch	Lunch	Lunch	Lunch	Lunch
14:00 - 15:45 V-notches <i>Alberto Sapora</i>	14:00 - 15:45 Overview on funding opportunities <i>Marco Paggi</i>	14:00 - 15:45 Fracture mechanics of joints <i>Maria Rosaria Marulli</i>	14:00 - 15:45 Multiscale modelling <i>Dominique Leguillon</i>	14:00 - 15:45 Modelling and simulation of heterogeneous materials <i>Sofia Mogilevskaya</i>
Coffee break	Coffee break	Coffee break	Coffee break	Coffee break
16:15 - 18:00 Fatigue failure: cracks and notch sensitivity <i>Alberto Sapora</i>	16:15 - 18:00 How to write a research proposal <i>Marco Paggi</i>	16:15 - 18:00 Advanced numerical modeling of failure processes <i>Zohar Yosibash</i>	16:15 - 18:00 Effective communication & presentations <i>Zohar Yosibash</i>	16:15 - 17:00 Effective commun. & presentations <i>Zohar Yosibash</i>
				17:00 - 17:30 Closing address