

# LMS internal discussion

## Microstructures

**Moderator:** Julie Diani

**Speakers:** Simon Hallais, Alain Twisungemariya, Julie Diani

**Date and Time:** November 06, 2025 (2 – 3 pm)

**Venue:** Amphi 104 (Pole Meca)

### Abstract

In this internal seminar, Simon, Alain and Julie will present an overview of design, multi-scale modeling and characterization of different types of metallic and polymeric microstructures.

**Simon Hallais**, an engineer in the lab, will discuss techniques for experimental characterization of microstructures using optical and electron microscopy. **Alain Twisungemariya**, a PhD student with Eric Charkaluk and Veronique Doquet, will present some of his experimental results on mechanical characterization of specific microstructures. **Julie Diani** will talk about multi-scale modeling to bridge microstructure and mechanical behavior. Specifically, she will discuss microstructure generation and micromechanics-based models.

### Format

Each speaker will have 10 minutes for a presentation, followed by 5 minutes for questions. The last 10 - 15 minutes will be allocated for the lab to engage in a larger discussion about exciting new open questions in the field.