A SERIES OF VOICES SHAPING SUSTAINABLE CHANGE

Meet the STEP-CHANGErs

Andrea Lucchini Huspek: **Decoating of Cutting Tools Materials Exploiting Vacuum and Liquid Plasma Technologies**
Cutting tools are widely exploited in almost every sector of the manufacturing industry, from automotive to biomedical and electronics applications. The demanding machining conditions required by modern standards call for superior surface hardness and corrosion resistance, which are achieved through the application of protective coatings. However, when cutting tools reach the end of their service life, the coating must be removed to allow for resharpening and regeneration of the tool. Traditionally, concentrated and harmful chemicals have been employed for coating stripping.
In contrast, the present research explores the use of green plasma techniques to remove hard coatings from cutting tool materials.

Camilla Quaresmini: **Modeling Epistemic Fairness in Networked Opinion Dynamics: A Socio-Technical Approach**
The aim of the dissertation is to reframe algorithmic fairness as an epistemic problem rooted in social power asymmetries. Focusing on diffusion processes such as sustainable mobility, it shows how overlooking credibility and knowledge distribution risks reinforcing inequalities. Drawing on the philosophical theory of epistemic injustice, I extend the Linear Threshold Model to capture how biases reshape adoption.
I introduce Epistemic Fairness as a principle for adjusting credibility attribution distortions, improving both network fairness and policy efficiency. This socio-technical approach bridges philosophy and engineering, offering decision-support tools that translate normative insights into formal models for fair policy design.

The event will be followed by a networking aperitif.

9th October 2025
5:00 - 6:00 pm
Alpha room, Building 24

Register here

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