

# Mixing in Action - Workshop of the CoPerMix (Control Prediction and Learning in Mixing) ITN Network



**17 - 21 October 2022**  
**An ICTP meeting**  
**Trieste, Italy**

Further information:

<http://indico.ictp.it/event/9867/>  
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This workshop is devoted to going beyond the simplest mixing situations and embrace complex situations involving the coupling between advection/diffusion in complex media or complex flows and the coupling with chemical reactions or phase changes. It will reach and expose the fellows to current research open questions and state of the art experimental, computational and theoretical techniques required to tackle complex mixing problems.

## Topics:

- Mixing & chemical reactions: chemical reactions, kinetics, catalysis, flow/reaction coupling, reaction fronts
- Mixing & source localization: reinforcement learning algorithms
- Mixing & geoscience: dispersion laws and stretching laws in porous media, implication for mixing
- Mixing in complex fluids: dispersion and mixing in non-Newtonian and granular media
- Beyond mixing: lamellar approach of spray evaporation, rain, clouds, solute precipitation

## Sponsor:

This project has received funding from the European Union's Horizon 2020 research and innovation program under the Marie Skłodowska-Curie grant agreement N°956457.

## Registration:

There is no registration fee.

Female scientists are encouraged to apply.

## Directors:

A. CELANI, ICTP, Italy  
E. VILLERMAUX, IRPHE Marseille, Spain

## Local Organiser:

A. CELANI, ICTP, Italy

## Speakers:

L. BIFERALE, Università di Roma Tor Vergata, Italy  
A. LOISY, IRPHE, Aix-Marseille Université, France  
M. VERGASSOLA, ENS Paris, France

## Deadline:

**15 September 2022**

Participation is by invitation only, and no general applications can be accepted.



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