

# Multiphysics

## Session organizers

1. Marcela Cruchaga, USACH, Santiago de Chile, Chile.
2. Sergio Preidikman, CONICET, FECFyN, Universidad Nacional de Córdoba, Córdoba, Argentina.
3. Mario Storti, CIMEC, CONICET, Universidad Nacional del Litoral, Santa Fe, Argentina.

## Description

This session deals with algorithms, numerical techniques, and scientific or industrial applications involving multiphysics problems, i.e., problems where multiple physical fields are coupled.

Typical examples are: fluid-structure interaction, electro- and thermo- mechanical interaction, free surface problems, magneto hydro-dynamics fluid-dynamics with chemical reactions, hydro- and aero-elasticity. The session focuses, particularly, on: (i) those situations where the interaction between the different physical fields is fundamental; (ii) novel algorithms that treat this interaction in a special way; (iii) numerical analysis and modeling techniques employed in multiphysics, among others.