Mini-course 06: Thermal Characterization of Materials at High-Temperatures: Design of Experiment and Multiphysics Inverse Analysis

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The emphasis of this mini-course will be on how to consider measurement errors for the solution of inverse problems. Examples of measurements will be presented. From these measurements, theoretical modeling of the process will be carried out. In addition, the theoretical hypotheses concerning the intrusive effects of sensors will be discussed. Models integrating the sensors will be proposed. A comparison between the theoretical measurements from the perfect model and those from the sensor model will be analyzed. Applications related to thermocouples and radiative sensors will be presented.

Period: 6/Nov - 10/Nov (1 week)

Lectures: 6, 7/Nov (from 9:00 to 12:00)

Room: 333