MASTER M2 internship + PhD Thesis on

Numerical Simulation of Droplet Evaporation

Contact:  
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Place:  
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Field:  
mechanical engineering, fluid mechanics, heat transfer, experiments

Context:

This Master internship will be done in the frame of a space project named “Drop Evaporation” onboard the International Space Station (ISS) that intends to study the effect of microgravity on the evaporation of droplets under electrical fields. In order to predict correctly the spreading and evaporation dynamics of the droplet in microgravity, we developed numerical simulations with both Comsol Multiphysics and a in-house code in Fortran. We succeeded with Comsol to model the problem of droplet evaporation in 3D unsteady using a specific boundary condition. In the frame of this internship, we aim to implement this boundary condition in the in-house Fortran code. Thus, the internship is devoted to write code lines, validate the implemented model.

This work will be done physically in Marseilles This Master M2 internship open on a Ph.D. Thesis subject. Joint Ph.D thesis with Aix-Marseille University is possible. Applications need to be submitted in English.

Skills needed: initiative, autonomy, curiosity, and experimentalist.

Complementary information: an apartment on Campus and a standard CNRS living allowance of 554€/month will be provided during the Master M2 internship. We also take care of one plane ticket in economy class.

Websites:

References:


Applications by email only to: david.brutin@univ-amu.fr