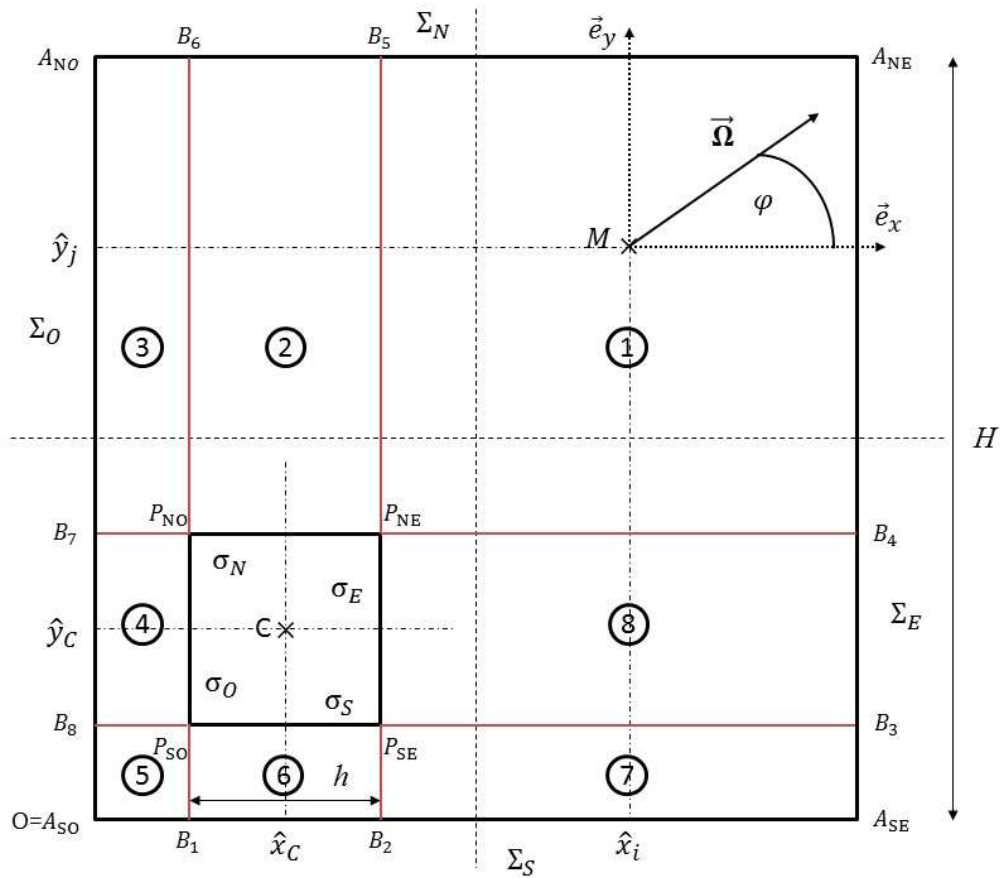


Contribution to modelling and numerical simulations of the semi-transparent medium including an obstacle

The subject dealt with is the study of the heat transfer by radiation coupled with conduction in a semi-transparent cavity including an obstacle.

It is the continuation of the PhD of Julien Djeumegni defended in 2021.

The aim is to calculate the temperature fields and the radiative heat flux in a square semi-transparent cavity with opaque boundaries and containing an obstacle. The boundaries are assumed to be black or grey.



Once the problem is adequately modelled, the equations will be computed in order to perform a parametric study. The goal is to investigate the impact of the size of the obstacle, the location of the obstacle and so on...