Postdoctoral position 2016

Projet ANR-14-CE05-0006

Non linear dynamics of a premixed flame front

IRPHE Marseille

CNRS - Centrale Marseille - Aix-Marseille Université

The IRPHE Laboratory is seeking candidates for a one year postdoctoral position to perform numerical simulations of the non linear dynamics of unstable premixed flames submitted to an external forcing. DNS and model equations results will be compared to experiments performed at IRPHE and to theory developed by Guy Joulin (PPRIME Poitiers). The candidate should have experience in numerical simulations. Experience in combustion, particularly premixed flames, and fluid mechanics is preferred.

References

Almarcha C., Denet B., Quinard J. (2015) Premixed flames propagating freely in tubes, Combustion and Flame, 162(4), 1225-1233

Almarcha C., Quinard J. , Denet B., Al Sarraf E., Laugier J.M., Villermaux E. (2015) Experimental two dimensional cellular flames, Physics of Fluids, 27, 091110

Joulin G., Denet B. (2014) Shapes and speeds of steady forced premixed flames, Phys. Rev. E 89:063001

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