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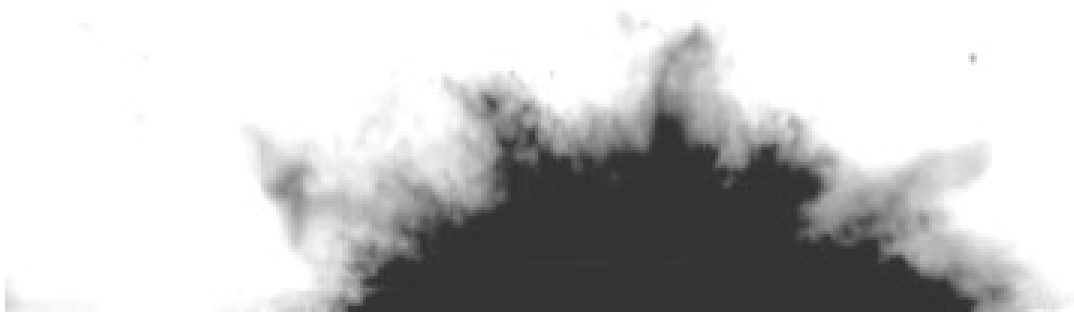
Dipartimento
di Ingegneria
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MODELLING OF SPRAYS: SIMPLE SOLUTIONS TO COMPLEX PROBLEMS



The image was provided by Professor C Crua (University of Brighton, UK)

ABSTRACT

Some new approaches to the solution of complex problems, focused on spray modelling, using relatively simple mathematical tools will be summarised. The following problems will be considered: the modelling of heating and evaporation of suspended droplets with applications to water sprays for fire suppression, and the modelling of micro-explosions with automotive applications. A number of other developments are also briefly summarised. These include the development of new mathematical tools for the modelling of spray ignition and combustion, the modelling of blended fuel droplet heating and evaporation using the previously developed theoretical tools, and the implementation of the newly developed models in ANSYS Fluent.

Ref. Prof. G.E. Cossali, g.cossali@unibg.it