



Meiji University Global COE Program 37th Mathematical Sciences based on



Modeling, Analysis and Simulation seminar

Date: February 10, 2011, 16:30~18:00

Location: Meiji Univ. Ikuta Campus, Build 2 Annex A, Room A207

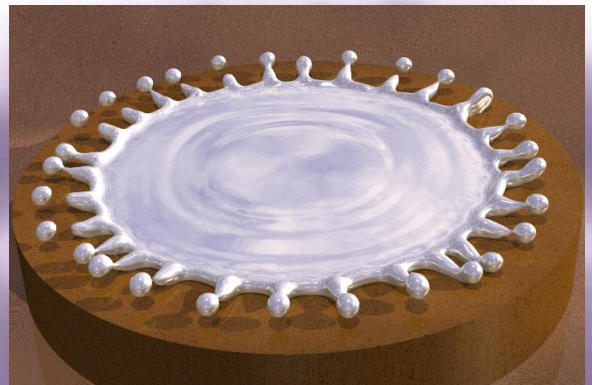
Kensuke Yokoi (Cardiff University, UK)

Title : Numerical studies of droplet impacting
and splashing

Abstract : In this presentation, I would like to talk about 3D numerical simulations of various types of droplet impacting phenomena such as droplet impacting into a thin liquid layer (milk crown?), droplet depositions onto dry surfaces and droplet splashing on dry surfaces.

The numerical framework is based on the CLSVOF method, the CIP-CSL method, VSIAM3 and the CSF model. I will also take about the importance of dynamic contact angle for droplet behaviours on dry surfaces.

There are some animation examples on my website: <http://www.kensuke.biz/kensuke>



A numerical result of droplet splashing onto a hydrophobic substrate.
200x200x100 grids are used.

Everyone is welcome to attend the MAS seminar.

Meiji institute for Advanced Study of Mathematical Science (<http://www.mims.meiji.ac.jp>)
(Organizers: M. Mimura, D. Ueyama, Y. Wakano, K. Ikeda and S.Kinoshita)

MAS seminar is partly supported by Meiji University Global COE program “Formation and Development of Mathematical Sciences Based on Modeling and Analysis” (<http://goe.mims.meiji.ac.jp/>), the Grant-in-Aid for Scientific Research (S), “Mathematical Theory of Nonlinear-Non-equilibrium Reaction-Diffusion Systems” by M. Mimura (<http://nnrds.math.meiji.ac.jp/>).



Access: 10 minutes on foot from Ikuta St. Odakyu line,
Or 10 minutes by bus No. 13「明治大学正門前」, get off at the last stop.
See http://www.meiji.ac.jp/koho/campus_guide/ for details.