

Cost Action MP0806 WG4

Informal Workshop on Particles in Turbulence – Applications (WP4)
November 12-13, 2009 in Warsaw, Poland
IPPT PAN, ROOM 228 (second floor)

Scientific Scope and Topics:

This workshop intends to bring together scientists with numerical and experimental expertise in “particles in turbulence” of different fields and scientific communities. One main objective of this meeting is to discuss the best ways to disseminate know-how and input from these different communities and other working groups of this action (see workplan for WG4). This will be achieved by short presentations of individual expertise from participants and two overview talks by invited speakers.

Scientific topics include:

- Transport in turbulent boundary layers and shear flows
- Segregation of particles in turbulent flows and its influence on mixing and particle collision processes
- Formation and growth of aerosol particles in turbulent flows
- Application of LES and DNS to support / validate modeling approaches. Specifically the development of closure models for sub grid scale modeling involving particle suspensions;
- Application of statistical physics and dynamical theory in the development of probabilistic methods for modeling one and two particle transport and dispersion.
- Experimental measurements of particles in turbulent flows, in particular the use of PIV, LDA and Lagrangian particle tracking.

Organizing Committee:

Holger Siebert, Mike Reeks, Jörg Schumacher, Szymon Malinowski

Local Organizers:

Szymon Malinowski, Tomasz A. Kowalewski

Date and Venue:

November 12/13 2009 at the Institute of Fundamental Technological Research, Polish Academy of Sciences (IPPT PAN), Warsaw, Poland, room 228, second floor

Tentative Program:

Thursday, Nov 12

09:00 – 09:30 Welcome & Discussion of Agenda

09:30 – 10:15 1st presentation of invited speaker: Martin Sommerfeld

10:15-10:45 Coffee brek

10:14 – 11:30 2nd presentation of invited speaker: Olivier Simonin

11:30 – 12:30 Short informal presentations of each participant's expertise (10+5 min)

Szymon Malinowski

Beat Luethi

Holger Siebert

Claudio Gheller

12:00 – 13:30 Lunch (ground floor)

13:30 – 14:30 Short informal presentations of each participant's expertise (10+5 min)

Eberhard Bodenschatz

Federico Toschi

Markus Abel

Christos Vassilicos

15:45 – 16:15 Coffee Break

16:15 – 18:45 Short informal presentations of each participant's expertise (10+5 min)

Jeremie Bec

Konrad Bajer

Mike Reeks

Ullar Rannik

19:30 Dinner (downtown)

Friday, Nov 13

09:00 – 9:15 Short informal presentations of each participant's expertise (10+5 min)

Tomasz Kowalewski

09:15 – 09.45 Visiting the cloud chamber and the laboratory (~ 30 minutes)

09:45 – 10.15 Coffee break

10.15 – 12.00 Round table discussion:

- What's to do next in WG4?

- *“Best ways to disseminate know-how and input from different communities and other working groups of this action”*

- Implementation of a web portal

- other open questions

12:00-13.30 Lunch (ground floor)