Schedule for DPG Physics School 2005: Nano - and Microfluidics

	Monday, 8.8.	Tuesday, 9.8.	Wednesday, 10.8.	Thursday, 11.8.	Friday, 12.8.
08:00	***Breakfast***				
9:00 – 9:45	***Welcome***	**A. Ajdari** Hydrodynamic and electrokinetic effects in microfluidics: principles and a few applications	**R. Winkler** Hydrodynamic interactions in soft matter systems: Microfluidics in simulations	**J. Dhont** Rod-like Brownian particles in shear flow	**U.Thiele** Fluidics of thin films
9:45 – 10:30	**H.G. Braun** From microfluidic to nanofluidic devices: Problems and opportunities of nanofluidic systems made from softmatter				
	Break				
11:00 – 11:45	**H.G. Braun** From microfluidic to nanofluidic devices: Problems and opportunities of nanofluidic systems made from softmatter	**C.-D. Ohl** Drug delivery with bubbles: Micro-fluidics at high Reynold-numbers	**C. Wagner** Single molecule manipulation	**J. Dhont** Rod-like Brownian particles in shear flow	**U. Thiele** Fluidics of thin films
11:45 – 12:30			Tutorial, Discussions, Poster		Tutorial, Discussions, Poster
12:30	***Lunch***				
14:30 – 15:15	**H.G. Braun** From microfluidic to nanofluidic devices: Problems and opportunities of nanofluidic systems made from softmatter	Tutorial, Discussions, Poster	**EXCURSION**	Tutorial, Discussions, Poster	**K. Jacobs** Probing the boundary conditions of fluids at solid surfaces: experimental nanofluidics
15:15 – 16:00	Tutorial, Discussions, Poster	**C. Wagner** DNA, RNA, protein and cell separation in automated high throuput lab on a chip devices		**U. Thiele** Fluidics of thin films	**M. Abel** A dynamical system approach to mixing in microfluidic devices
	Break			***Break***	
16:30 – 18:00	**S. Hardt** Engineering models for microfluidic devices	**C. Wagner** DNA, RNA, protein and cell separation in automated high throuput lab on a chip devices		**U.Thiele** Fluidics of thin films	**M. Abel** A dynamical system approach to mixing in microfluidic devices
16:30 – 18:00		Tutorial, Discussions, Poster			Tutorial, Discussions, Poster
18:30	***Dinner***				
20:00 – 21:30	Tutorial, Discussions, Poster	Tutorial, Discussions, Poster		Tutorial, Discussions, Poster	Tutorial, Discussions, Poster

Schedule for DPG Physics School 2005: Nano - and Microfluidics

	Saturday, 13.8.	Sunday, 14.8.	Monday, 15.8.	Tuesday, 16.8.	Wednesday, 17.8.
08:00	***Breakfast***				
9:00 – 9:45	**Presentation training** (with video control) or tutoring in application writing (according to participants)	**Free time** or presentation training or tutoring in application writing (according to participants)	**A. Günther** With Microbubbles to Nanoparticles	**J. Kijlstra** Microfluidics for diagnostic applications: activities at Bayer	**O. Prucker**
9:45 – 10:30					
	Break				
11:00 – 11:45	**Probing the boundary conditions of fluids at solid surfaces: experimental nanofluidics**		**A. Günther** Multiphase Microfluidics: A World Beyond Taylor Flow	**K. Jacobs** Probing the boundary conditions of fluids at solid surfaces: experimental nanofluidics	**F. Mugele** Nanofluidics probed by a surface forces apparatus
11:45 – 12:30			Tutorial, Discussions, Poster	Tutorial, Discussions, Poster	
12:30	***Lunch***				
14:30 – 15:15			**A. Günther** Multiphase Microfluidics: A World Beyond Taylor Flow	**A. Bausch** Microrheology	**DEPARTURE**
15:15 – 16:00			**F. Schönfeld** Static and induced charge eletroosmotic flows		
	Break				
16:30 – 18:00			**F. Schönfeld** Static and induced charge eletroosmotic flows	**X. Hu** Microfluidic simulations	
16:30 – 18:00			Tutorial, Discussions, Poster		
18:30	***Dinner***				
20:00 – 21:30			Tutorial, Discussions, Poster	Tutorial, Discussions, Poster	