

CSM 2019

Colloidal Science & Metamaterials 2019

A  **microflusa** Conference

February 25th – 27th 2019

Paris, France



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Day 1 – February 25th, 2019 (Monday)

09:00 – 09:30	WELCOME COFFEE
09:30 – 09:40	Patrick Tabeling - CSM2019 Committee <i>Welcoming Speech</i>
09:40 – 10:25	Eli Yablonovitch <i>The Electromagnetic Spectra of Ordinary Objects</i>
10:25 – 10:55	Arnaud Tourin <i>Acoustic bubbly metamaterials: subwavelength focusing, negative refraction and super-absorption</i>
10:55 – 11:25	COFFEE BREAK
11:25 – 12:10	Frank Scheffold <i>Band gap formation and Anderson localization in hyperuniform disordered photonic materials</i>
12:10 – 12:40	Konstantin Morozov <i>Photonics of template-mediated lattices of colloidal clusters</i>
12:40 – 13:00	Ilham Maimouni Maria Russo <i>Microfluidic fabricated foams for photonic applications</i>
13:00 – 14:30	LUNCH
14:30 – 15:15	Wiebke Drenckhan <i>Hard packing problems with soft objects: towards an explicit control of bubble or drop assemblies</i>
15:15 – 15:30	Raj Kumar <i>Soft foam as acoustic gradient index metasurfaces</i>
15:30 – 15:45	Claas Willem Visser <i>In-air microfluidics enables rapid fabrication of emulsions</i>
15:45 – 16:00	Gaël Ginot <i>Many-body interactions in loose packing of soft deformable objects</i>
16:00 – 16:15	Jacopo Vialto <i>Direct adsorption and organization of colloidal particles at the air/water interface: structural and dynamic properties</i>
FLASH TALK (SESSION I)	
16:15 – 16:20	Stefan Aeby <i>3D Disordered Photonic Metamaterials by Direct Laser writing</i>
16:20 – 16:25	Noa Burshtein <i>Inertioelastic flow instability at a stagnation point</i>
16:25 – 16:30	Jean Cappello <i>Controlling particle trajectories in confined flows via particle shape</i>
16:30 – 16:35	Lucie Ducloué <i>Secondary flows of viscoelastic fluids in curved microchannels</i>
16:35 – 17:00	COFFEE BREAK
17:00 – 17:45	Salvatore Torquato <i>Generation of Disordered Hyperuniform Materials with Novel Physical Properties</i>
18:00 – 19:00 pm	WELCOME COCKTAIL

Day 2 – February 26th, 2019 (Tuesday)

09:00 – 09:30	WELCOME COFFEE
09:30 – 10:15	Paul Chaikin To Be Announced
10:15 – 10:45	Marian Florescu <i>Hyperuniformity and Local Self-Uniformity in Photonic Networks</i>
10:45 – 11:15	COFFEE BREAK
11:15 – 11:45	Romain Pierrat <i>Wave propagation in disordered hyperuniform structures: from transparency to strong absorption</i>
11:45 – 12:00	Luis Froufe-Pérez <i>Light Transport Properties in Stealthy Hyperuniform 2D Materials</i>
12:00 – 12:15	Mayte Gomez Castano <i>Tunable index metamaterials made by bottom-up approaches</i>
12:15 – 12:30	Ville Liljeström <i>Electrostatic self-assembly protein cages, viruses, and synthetic nanoparticles into periodic superstructures</i>
12:30 – 13:00	Round Table <i>Band Gap, Hyperuniformity, Self-assembly...</i>
13:00 – 14:30	LUNCH
14:30 – 15:00	Philippe Barois <i>The bottom-up approach to metamaterials operating in visible light</i>
15:00 – 15:30	Valeria Garbin <i>Dynamic capillary assembly of colloids at interfaces with 10,000g accelerations</i>
15:30 – 15:45	Andreea Pasc <i>Responsive surfactants and solid lipid particles templating for nanostructured silica materials</i>
15:45 – 16:00	Vincent Poulichet <i>Dynamic photocontrol of particle deposition in a moving meniscus</i>
16:00 – 16:15	Rajam Elancheliyan <i>Optical resonators with large magnetic responses</i>
	FLASH TALK (SESSION II)
16:15 – 16:20	Nicolas Pannacci <i>Wettability effect on CO₂-foam flow in porous medium</i>
16:20 – 16:25	Mohamad Danial Shafiq <i>Evaporation of drops: The role of long-range colloidal interactions</i>
16:25 – 16:30	Inese Silkina <i>Microgravity Experiments in Colloid Science</i>
16:30 – 17:00	COFFEE BREAK
17:00 – 17:15	Reinhard Höhler <i>Tuning attractive bubble interactions in monodisperse foams yields new equilibrium structures</i>
17:15 – 17:30	Sophie Romanarivo <i>Boosted annealing of colloidal monolayers driven by active dopants</i>
17:30 – 17:45	Mao Fukuyama <i>Control of the molecular transfer between microdroplets and nanodroplets in microfluidics</i>
19:00	Dinner for Invited Speakers

Day 3 – February 27th, 2019 (Wednesday)

09:00 – 09:30	WELCOME COFFEE
	David J. Pine
09:30 – 10:15	<i>Self-assembly of Janus colloids into colloidal fibers, bilayers, and rings (catalyzed by planar surfaces)</i>
	Ludovic Berthier
10:15 – 10:45	<i>The large scale structure of jammed particle packings</i>
10:45 – 11:15	COFFEE BREAK
	Damien Baigl
11:15 – 11:45	<i>Reconfigurable self-assembly: from self-foldable DNA nanomachines to photoswitchable dissipative colloidal crystals</i>
	Tommaso Pietro Fraccia
11:45 – 12:00	<i>Liquid crystal self-assembly of nucleotides triphosphate in backbone-free nucleic acids exhibiting Watson-Crick selectivity</i>
	Mauricio Pilo-Pais
12:00 – 12:15	<i>DNA-Mediated Self-Assembly of Plasmonic Antennas with a Single Quantum Dot in the Hot-Spot</i>
	Itzhak Fouxon
12:15 – 12:30	<i>Hydrodynamic interactions and formation of droplet clusters in Poiseuille flow</i>
	Anthony Ge
12:30 – 12:45	<i>Flow-assisted droplet assembly in a 3D microfluidic channel</i>
	Amir Gat
12:45 – 13:00	<i>The Effect of Connections Between Fluid-Filled Cavities on the Dynamics of Solid-Liquid Composite Beams</i>
13:00 – 14:30	LUNCH
	Blaise Delmotte
14:30 – 14:45	<i>Hydrodynamic Genesis of Colloidal Creatures</i>
	Peter Schall
14:45 – 15:15	<i>Colloidal architectures: assembly and mechanical properties</i>
	Silvia Vignolini
15:15 – 16:00	<i>Colour Engineering: from nature to applications</i>
16:00 – 16:10	CONCLUDING REMARKS