

# Chemical Complexity & Biology

January, 19<sup>th</sup> - 20<sup>th</sup> 2015

## Program

### *Day 1: Monday, January 19<sup>th</sup>*

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08.30 – 09.00	<i>Registration</i>	
09.00 – 09.15	Welcome	Marc-André Delsuc
09.15 - 10.15	<b>Opening lecture</b> Towards adaptive chemistry - constitutional dynamic chemistry and networks	Jean-Marie Lehn
10.15 – 10.45	Theoretical and experimental challenges in the Complex Systems Digital Campus	Paul Bourguine
10.45– 11.15	<i>Coffee break</i>	
11.15 – 11.55	Molecular interactions with the bacterial cell wall by liquid state, standard and DNP solid state NMR	Jean-Pierre Simorre
11.55 – 12.35	Parallel tuning of activation and repression in intrinsic disorder-mediated allostery	Vincent J. Hilser
12.35– 14.00	<i>Lunch buffet and poster session</i>	
14.00 – 14.40	Proximal methods: tools for solving inverse problems in a large scale. Application to biophysics measurements processing	Emilie Chouzenoux
14.40 – 15.00	Monitoring protein-ligand interactions in human carbonic anhydrase by long-range pseudo contact shift NMR	Daniel Häussinger
15.00 - 15.40	2D FT-ICR MS: from a laboratory curiosity to an analytical tool	Christian Rolando
15.40– 16.10	<i>Coffee break</i>	
16.10 – 16.50	How scarce sequence elements control the function of single $\beta$ -thymosin/WH2 intrinsically disordered domains in actin assembly	Carine van Heijenoort
16.50 – 17.10	m1A modification in tRNA	Carine Tisné
17.10 – 17.30	Prion quasi-species and molecular basis of auto-perpetuation of Prion structural information	Human Rezaei

## Day 2: Tuesday, January 20<sup>th</sup>

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09.00 – 09.40	Dr. Ehrich's magic bullet: is perfect anticancer drug possible?	<b>Roman A. Zubarev</b>
09.40 – 10.20	Identifying the conditions needed for stability and complexity in living systems	<b>Robert Pascal</b>
10.20 – 10.40	Study of hetero-association between tetracycline and caffeine by means of diffusion-ordered NMR spectroscopy	<b>Anatoly Buchelnikov</b>
10.40 – 11.10	<i>Coffee break</i>	
11.10 – 11.50	Unnatural Information-containing Macromolecules	<b>Jean-François Lutz</b>
11.50 – 12.10	Chemical cross-linking and mass spectrometry to determine the interaction network of protein complexes	<b>Nha-Thi Nguyen-Huynh</b>
12.10 – 12.30	Sensing of analytes using fluorescent amphiphiles	<b>Ziya Kostereli</b>
12.30 – 14.00	<i>Lunch buffet and poster session</i>	
14.00 – 14.40	Gene regulatory network inference using structural biological a priori	<b>Camille Couprie</b>
14.40 – 15.00	Solid-state NMR as an emerging technique to determine supramolecular interactions in biological and chemical complexes	<b>Antoine Loquet</b>
15.00 – 15.30	<i>Coffee break</i>	
15.30 – 15.50	Membrane structure and interactions of the amino-terminus of huntingtin and its regulatory role in poly-glutamine aggregation	<b>Burkhard Bechinger</b>
15.50 – 16.30	Kinetic mechanism of RNA-mediated genetic regulation	<b>Philippe Dumas</b>

*End of the symposium*