



Primošten, Croatia, 30/9 - 9/10 2012.

11 th Greta Pifat-Mrzljak International School of Biophysics Programme										
	September 30 Sunday	October 1 Monday	October 2 Tuesday	October 3 Wednesday	October 4 Thursday	October 5 Friday	October 6 Saturday	October 7 Sunday	October 8 Monday	October 9 Tuesday
9 – 9 ⁴⁵	ARRIVALS	Watts 1	Zagrovic 1	Ziherl 1	Podgornik 1	Podgornik 3	Grubmueller 1	Steinhoff 1	Vaziri 2	Siber 1
10 -10 ⁴⁵		Watts 2	Zagrovic 2	Ziherl 2	Podgornik 2	Wade 1		Steinhoff 2	Vaziri 3	Siber 2
COFFEE										
11 ¹⁵ -12		Oostenbrink 1	Ban1	Sackmann 1	Voth 1	Wade 2	Grubmueller 2	Smith 1	Tolic 1	Siber 3
12 ¹⁵ -13		Oostenbrink 2	Ban2	Sackmann 2	Voth 2	Stark 1	Perczel 1	Smith 2	Tolic 2	Closing remarks
LUNCH						EXCURSION				
16-17	REGISTRATION	Watts 3	Zagrovic3	Ziherl 3	Stark 2		Perczel 2	Steinhoff 3	Tossi 1	DEPARTURE
17-18	INTRODUCTION 17 ¹⁵ -19 Cantor 1&2	Oostenbrink 3	Ban3	Sackmann3	Wade 3		Perczel 3	Vaziri 1	Tossi 2	
DINNER									GALA DINNER	
20- 22	20 ³⁰ -22 Wellcome drink	Posters	Short talks	Posters	Posters		Short talks	Short talks		

LECTURES:

Cantor 1: Dealing with stochastic noise in very dilute samples allows effective non-invasive pre-natal DNA diagnostics
Cantor 2: Deuterium isotope effects may turn nutrients into highly effective drugs

Watts 1: 'Principles of solid state NMR for the study of biomolecules'
Watts 2: 'Solid state NMR for structural studies of large integral membrane proteins'
Watts 3: 'Receptor dynamics and structure in membranes resolved using solid state NMR'

Oostenbrink 1: 'Ensembles and sampling, leading to molecular dynamics simulations'
Oostenbrink 2: 'Structure refinement using molecular dynamics simulations (NMR observables)'
Oostenbrink 3: 'Calculation of free energies from molecular simulation'

Šiber 1: 'Mean field electrostatics explained through applications to viruses' 1
Šiber 2: 'Mean field electrostatics explained through applications to viruses' 2
Šiber 3: 'Mean field electrostatics explained through applications to viruses' 3

Ban 1: 'Structural basis of iterative fatty acid synthesis catalyzed by giant multienzyme complexes'
Ban 2: 'Mechanistic insights into co-translational protein folding, processing and membrane targeting'
Ban 3: 'Atomic structures of the eukaryotic ribosome and insights into the regulation of protein synthesis'

Ziherl 1: "Shape and structure of simple animal tissues: A mechanical perspective." 1
Ziherl 2: "Shape and structure of simple animal tissues: A mechanical perspective." 2
Ziherl 3: "Shape and structure of simple animal tissues: A mechanical perspective." 3

Sackmann 1: 'Thermoelasticity of the self organisation and biological function of composite cell membranes'
Sackmann 2: 'Microviscoelasticity and viscoplasticity of semiflexible biomacromolecular networks and cells'
Sackmann 3: 'Cell Dynamics. From intracellular transport to locomotion and immunological reactions'

Podgornik 1: DNA-DNA electrostatic interactions
Podgornik 2: Long range order in DNA mesophases
Podgornik 3: Ordering and condensation of DNA in bacteriophages

Wade 1: 'An introduction to the BD simulation method and recent applications to biomacromolecular systems'1
Wade 2: 'An introduction to the BD simulation method and recent applications to biomacromolecular systems'2

Wade 3: 'An introduction to the BD simulation method and recent applications to biomacromolecular systems'3

Stark 1: 3D Structure determination by electron microscopy: Introduction into various techniques
Stark 2: How to visualize structural dynamics by single particle cryo electron microscopy

Voth 1: 'Multiscale Theory and Simulation for Biomolecular Systems'
Voth 2: 'The Challenge of Modeling Proton Transport in Proteins'

Grubmueller 1: 'Atomistic simulations of biological macromolecules I: Introduction and Method'
Grubmueller 2: 'Atomistic simulations of biological macromolecules II: What can we learn?'

Perczel 1: 'Peptide and protein folding as seen by NMR (and ECD)'
Perczel 2: 'In cell NMR of intrinsically dynamic proteins'
Perczel 3: 'Quantitative ECD analysis of peptides and proteins: the CCA+ method'

Vaziri 1: "A Physicist Approach to Biology?" 1
Vaziri 2: "A Physicist Approach to Biology" 2
Vaziri 3: "A Physicist Approach to Biology" 3

Steinhoff 1: 'Site-directed spin labeling and electron paramagnetic resonance (EPR) spectroscopy: An introduction'
Steinhoff 2: 'Inter- and intramolecular distance measurements using cw and pulse EPR spectroscopy'
Steinhoff 3: 'Structure and Dynamics of membrane proteins studied by EPR spectroscopy'

Žagrović 1 'Conformational averaging in structural biology: challenges and computational solutions'1
Žagrović 2: 'Conformational averaging in structural biology: challenges and computational solutions'2
Žagrović 3: 'Conformational averaging in structural biology: challenges and computational solutions'3

Tossi 1: 'Membrane-active helical antimicrobial peptides'
Tossi 2: "Methods of studying AMPs (antimicrobial peptides)"

Tolić 1: 'Microtubules and motor proteins I'
Tolić 2: 'Microtubules and motor proteins II'

Smith 1: 'Introduction to Coarse graining - Physical background and applications '1
Smith 2: 'Introduction to Coarse graining - Physical background and applications '2