



SoftComp & ESMI Annual Meeting

SCIENTIFIC PROGRAM

28 May 2018

Primosten, Croatia

28 – 31 May 2018

Each plenary and contributed talk shall include about 5 minutes for general discussion.



	Monday 28 May 2018	Tuesday 29 May 2018	Wednesday 30 May 2018	Thursday 31 May 2018
09:00		Plenary session	Plenary session	Plenary session
10:00		NA1 NA2 NA4	NA1 NA2 NA4	NA1 NA2
11:00		Coffee break	Coffee break	Coffee break
11:30		NA1 NA2 NA4	NA1 NA2 NA4	NA1
12:00	Lunch break	NA1 NA2 NA4	NA1 NA2 NA4	
12:10				
12:30				
12:50				
13:10				
14:00		Lunch break	Lunch break	
14:40	Welcome			EUSMI General Assembly
14:50	Plenary session	Plenary session	Plenary session	
15:00				
15:40		NA1 NA2		Coffee break
15:50	Coffee break		NA4	
16:00				
16:20	NA1 NA2 NA4			EUSMI General Assembly
16:30				
16:40				
17:00			Coffee break	
17:20				
17:30		Coffee break		
17:40				
17:50				
18:00				
18:30	SoftComp NCC38 meeting (members only)	SoftComp NGB 15 meeting		
20:00			Social dinner	

NA SoftComp - Network Area
 NCC SoftComp - Network Coordination Committee (members only)
 NGB SoftComp - Network Governing Board

May 28, 2018

- 14:40 *Welcome*
Gerhard Gompper
Forschungszentrum Jülich
Room Kravata
- 14:50 *Invited talk: Pore translocation of knotted polymers*
Cristian Micheletti
SISSA
Room Kravata
- 15:30 *Presentation of the new SoftComp partner*
Achille Giacometti
Univ. Ca' Foscari
Room Kravata
- 15:50 *Coffee break*
- 16:20 Network Area meetings
- Network Area 1:
Particles and proteins (part 1)
Room Kravata
 - Network Area 2:
From cells to tissues
Room Penkala 1
 - Network Area 4:
Copolymers and blends
Room Penkala 2
- 17:40 End of the sessions
- 18:30 SoftComp Network Coordination Committee N. 38 meeting (members only)



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May 29, 2018

- 09:00 *Invited talk: Sticky droplets and sinking bubbles: curious physics of yield-stress fluids*
Randy Ewoldt
University of Illinois
Room Kravata
- 09:40 *Presentation of the new SoftComp partner*
Fabien Dutertre
Univ. Lyon – Saint Etienne
Room Kravata
- 10:00 Network Area meetings
- Network Area 1:
Complex mechanics and dynamics
Room Kravata
 - Network Area 2:
Surfactants
Room Penkala 1
 - Network Area 4:
Nanocomposites
Room Penkala 2
- 11:00 Coffee break
- 11:30 Network Area meetings
- Network Area 1:
Particles and proteins (part 2)
Room Kravata
 - Network Area 2:
Proteins
Room Penkala 1
 - Network Area 4:
Assembly and supramolecular materials
Room Penkala 2
- 13:10 End of the sessions



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May 29, 2018

- 15:00 Invited talk: Assembly of polymers and colloids at liquid interfaces
 Cécile Monteux
 ESPCI
 Room Kravata
- 15:40 Network Area meetings
- Network Area 1:
 Hybrid Materials
 Room Kravata
 - Network Area 2:
 Supramolecular structures and self-organisation
 Room Penkala 1
- 17:20 Coffee break
- 17:50 End of the sessions
- 18:30 SoftComp Network Governing Board N. 15 meeting
 Room Kravata



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May 30, 2018

- 09:00 *Invited talk: Adaptive and Autonomous Bioinspired Materials Systems*
Andreas Walther
University of Freiburg
Room Kravata
- 09:40 *Presentation of the new SoftComp partner*
Laurent Chazeau
INSA-Lyon
Room Kravata
- 10:00 Network Area meetings
- Network Area 1:
Complex liquids
Room Auditorium
 - Network Area 2:
Biological and biomedical nanoparticles
Room Penkala 1
 - Network Area 4:
Networks and gels
Room Penkala 2
- 11:00 Coffee break
- 11:30 Network Area meetings
- Network Area 1:
New methods in soft matter
Room Kravata
 - Network Area 2:
Membrane curvature and mechanics
Room Penkala 1
 - Network Area 4:
Rheology
Room Penkala 2
- 13:10 Lunch break



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May 30, 2018

- 15:00 *Invited talk: iPAINtING a colorful picture of soft matter with single-molecule localization microscopy*
 Ilja Voets
 TU Eindhoven
 Room Kravata
- 15:40 Network Area meetings
- Network Area 4:
 Other
 Room Penkala 2
- 17:00 Coffee break
- 17:30 End of the session
- 20:00 Social dinner



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May 31, 2018

- 09:00 *Invited talk: Surface roughness: a key property for the design of soft materials*
Lucio Isa
ETH Zürich
Room Kravata
- 09:40 *Presentation of the new SoftComp web portal*
Angela Wenzik – Flavio Carsughi
Forschungszentrum Jülich
Room Kravata
- 10:00 Network Area meetings
- Network Area 1:
Particles and proteins (part 3)
Room Kravata
 - Network Area 2:
Surfaces and Interfaces
Room Penkala 1
- 11:00 Coffee break
- 11:30 Network Area meetings
- Network Area 1:
Soft materials and surfaces
Room Kravata
- 12:30 Lunch break
- 14:00 EUSMI General Assembly
- 16:00 Coffee break
- 16:30 EUSMI General Assembly
- 18:00 End of the Annual Meeting



Network Area meetings Programmes

The speakers are kindly asked to respect their allocated time (20 min),
including 5 minutes discussion



Network Area 1
Particles and proteins (part 1)
Room Kravata

May 28, 2018

- 16:20 *Short-time self-diffusion of immunoglobulin under different crowding conditions*
Marco Grimaldo
Institute Laue-Langevin
- 16:40 *Stress-Strain behaviour of clusters formed by capillary forces: A study with MD simulations*
Sebastian Bindgen
KU Leuven
- 17:00 *Colours and textures in microgel suspensions*
Quentin Nozet
ESPCI
- 17:20 *3D simulation of dense granular flow in a rotating drum*
Angelica M.G. Arseni
Univ. Naples
- 17:40 End of the session

Network Area 1
Complex mechanics and dynamics
Room Kravata

May 29, 2018

- 10:00 *Intermittent and heterogeneous dynamics in soft glassy materials: experiment and simulations*
Raffaele Pastore
Univ. Napoli
- 10:20 *Dynamics and instabilities of viscoelastic sheets from droplets of a supramolecular organogelator solutions impacting on small solid targets*
Ameur Louhici
FORTH
- 10:40 *Fracture in three dimensions*
Edward Muir
Univ. Edinburgh
- 11:00 End of the session

Network Area 1
Particles and proteins (part 2)
Room Kravata

May 29, 2018

- 11:30 *PEGylated PNIPAM microgels : synthesis and solution behaviour*
Julien El Sayed
ESPCI
- 11:50 *Micromechanics of ultrasoft solids by infrasonic wave propagation*
Jan Maarten van Doorn
Univ. Wageningen
- 12:10 *Effective interactions in protein solutions induced by ternary salts*
Fajun Zhang
Univ. Tübingen
- 12:30 *Liquid-liquid phase separation in protein solutions induced by multivalent cations*
Olga Matsarskaia
Univ. Tübingen
- 12:50 *A spheroidal squirmer in shear flow*
Kai Qi
Forschungszentrum Jülich
- 13:10 End of the session



Network Area 1
Hybrid materials
Room Kravata

May 29, 2018

- 15:40 *Rheology and microstructure of mixtures of iota and kappa-carrageenan in the presence of Calcium ions*
Frédéric Renou
IMMM
- 16:00 *Multi-Functional Nano-Carbon Composite Materials Network (MultiComp)*
Sharali Malik
KIT
- 16:20 *Investigating TPU microstructure and mechanical behaviour: application to bitumen modification*
Raïssa Gallu
INSA
- 16:40 End of the session



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Network Area 1
Complex liquids
Room Kravata

May 30, 2018

- 10:00 *Frank Elastic Constants of Liquid Crystals: Theory and Simulation*
Sergei Egerov
Univ. Mainz
- 10:20 *Ferronematic assembly in magnetically doped liquid crystals*
Annette Schmidt
Univ. Cologne
- 10:40 *Size and concentration effects on particle diffusion in complex fluids as probed by magnetic particle nanorheology*
Melissa Hermes
Univ. Cologne
- 11:00 End of the session

Network Area 1
New methods in soft matter
Room Kravata

May 30, 2018

- 11:30 *High frequency rheometry of colloidal dispersion from hard to soft from smooth to rough*
Jan Vermant
ETH Zürich
- 11:50 *Combining optical heating and nanothermometry*
Marta Quintanilla
CIC biomaGUNE
- 12:10 *New molecular sensors for nanorheology of complex fluids*
Pieter van der Scheer
Univ. Wageningen
- 12:30 *Fast, quantitative and real-time flow imaging using Fourier-Transform Laser Speckle Imaging (FT-LSI)*
Jesse Buijs
Univ. Wageningen
- 12:50 End of the session

Network Area 1
Particles and protein (part 3)
Room Kravata

May 31, 2018

- 10:00** *Unification of Lower and Upper Critical Solution Temperature Transitions in Aqueous Protein Solution*
Nafisa Begam
Univ. Tübingen
- 10:20** *Critical Behavior of Active Brownian Particles*
Peter Virnau
Univ. Mainz
- 10:40** *Microscopic dynamics during the yielding of a dense glass of soft spheres*
Laurence Ramos
CNRS-Montpellier
- 11:00** End of the session



Network Area 1
Soft materials and surfaces
Room Kravata

May 31, 2018

- 11:30** *An atomistic view of surfaces using NMR*
Olivier Lafon
Univ. Lille
- 11:50** *Dynamics of adsorbed layer in hybrid hydrogels*
Anne-Charlotte Le Gulluche
ESPCI
- 12:10** End of the session



Network Area 2
From cells to tissues
Room Penkala 1

May 28, 2018

- 16:20 *Modeling crawling cells in silico*
Clara Abaurrea Velasco
Forschungszentrum Jülich
- 16:40 *The migration and invasiveness of cancer cells based on the fluorescent imaging techniques*
Roza Pawlowska
Polish Academy of Sciences
- 17:00 *Mechanics of tissue competition: The surprising role of cross adhesion*
Jens Elgeti
Forschungszentrum Jülich
- 17:20 *Effect of Flow on Bacterial Biofilm Formation, Morphology and Wetting Properties*
Federica Recupido
Univ. Naples
- 17:40 End of the session



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Network Area 2
Surfactants
Room Penkala 1

May 29, 2018

- 10:00 *High-pressure small-angle scattering experiments to probe the supramolecular assembly of polysaccharide/surfactant systems*
Leonardo Chiappisi
Institut Laue-Langevin
- 10:20 *Phase behaviour of aqueous solutions of linear sodium alkylbenzene sulfonate under quiescent and flow conditions*
Sepideh Khodaparast
Imperial College London
- 10:40 *Lyotropic liquid crystalline phases for the formulation of future functional foods*
Michael Rappolt
Univ. Leeds
- 11:00 End of the session

Network Area 2
Proteins
Room Pankala 1

May 29, 2018

- 11:30 *Silk Protein Solution: A Natural Example of Sticky Reptation*
Charley Schaefer
Univ. York
- 11:50 *Entropic Allostery of Protein Binding and Elastic `Allosteron' Networks*
Alice von der Heydt
Univ. Durham
- 12:10 *Multiscale mechanics: from single folded proteins to cross-linked protein networks*
Lorna Dougan
Univ. Leeds
- 12:30 *The conformational ensemble of polyglutamines: A Monte Carlo study*
Arne Böker
Univ. Halle
- 12:50 *Myosin 1b alters actin dynamics through catch bond-like force regulation*
Patricia Bassereau
Institut Curie
- 13:10 End of the session



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Network Area 2
Supramolecular structures and self-organisation
Room Penkala 1

May 29, 2018

- 15:40 *Dual responsive supramolecular assembly – unveiling the fine structure of azobta fibres and their complex (dis)assembly pathways*
Marieke Gerth
TU Eindhoven
- 16:00 *SAXS-on-a-chip: probing the time evolution of the lamellar-microemulsion transition in a microfluidic device*
Bruno Silva
International Iberian Nanotechnology Laboratory
- 16:20 *Smectic phase in suspension of gapped DNA duplexes*
Sanja Novak
Forschungszentrum Jülich
- 16:40 *RNA based nanostructures and their applications for gene expression regulation*
Arkadiusz Chworos
Polish Academy of Sciences
- 17:00 *Self-assembled hydrogels based on grafted co-poly electolites*
Christophe Chassenieux
CNRS
- 17:00 *End of the session*



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Network Area 2
Biological and biomedical nanoparticles
Room Penkala 1

May 30, 2018

- 10:00 *Extracellular Vesicles Visualization by Multiplex Fluorescent Tools - Conjugated Oligoelectrolytes*
Justyna Milczarek
Polish Academy of Sciences
- 10:20 *Iron meets Copper in the Nanoscale towards Diverse Cuprous Nanomaterials. Comparative Bioevaluation Cu₂O vs CuFeO₂*
Orestis Antonoglou
Univ. Thessaloniki
- 10:40 *Bimetallic nanoparticles of bio-essential metals as enhanced antimicrobial agents*
Kleoniki Giannousi
Univ. Thessaloniki
- 11:00 End of the session



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Network Area 2
Membrane curvature and mechanics
Room Penkala 1

May 30, 2018

- 11:30 *Nanoparticles at small vesicles: curvatures at play*
Thorsten Auth
Forschungszentrum Jülich
- 11:50 *Septins sense micron scale curvature and induce vesicle deformations*
Alexandre Beber
Institut Curie
- 12:10 *Tension-regulated activity of the ESCRT membrane-remodelling complex*
Paul Beales
Univ. Leeds
- 12:10 *The Mechanics of Vesicle Blebbing*
Sebastian Hillringhaus
Forschungszentrum Jülich
- 12:30 End of the session



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Network Area 2
Surfaces and Interfaces
Room Penkala 1

May 31, 2018

- 10:00** *Capillary Bridges on Liquid-Infused Surfaces*
Alvin Shek
Univ. Durham
- 10:20** *Exploiting complex formation between polysaccharides and protein microgels to influence particle stabilization of water in water emulsions*
Taco Nicolai
IMMM
- 10:40** *Complex multi-frequency surface patterning by wrinkling superposition*
Luca Pellegrino
Imperial College London
- 11:00** End of the session



Network Area 4
Copolymers and Blends
Room Penkala 2

May 28, 2018

- 16:20 *Tuning the structure of PBT/PTHF segmented copolymers: a process-oriented approach*
Matthias Nébouy
INSA-Lyon
- 16:40 *Morphologies of folded flexible--stiff multiblock copolymers*
Wolfgang Paul
Univ. Halle
- 17:00 End of the session



**Network Area 4
Nanocomposites**
Room Penkala 2

May 29, 2018

- 10:00 *Exploring the synthetic pathways towards functional nanocomposites*
Lisa Fruhner
Forschungszentrum Jülich
- 10:20 *Uniquely developing tunable morphologies and carbon nanotube localization in
biphasic polymer blends by compatibilizer grafting*
An-Sofie Huysecom
KU Leuven
- 10:40 *Embedding quantum dots in polymer particles by electrospraying*
Robin Koekoekx
KU Leuven
- 11:00 End of the session



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Network Area 4
Assembly and supramolecular materials
Room Penkala 2

May 29, 2018

- 11:30 *Imaging supramolecular nanostructures by super-resolution microscopy in organic solvents*
Antonio Aloï
TU Eindhoven
- 11:50 *Integrative modeling of biomolecular assemblies*
Matteo De Giacomo
Univ. Durham
- 12:10 *Fluorescence application for investigation of polyelectrolytes and interpolyelectrolyte complexes*
Anastasiia Murmiliuk
Charles University
- 12:30 *Coassembly of poly(methacrylic acid-co-polythylene glycol methacrylate) and N-dodecylpyridinium chloride in aqueous solutions: Stopped flow SAXS study*
Anastasiia Fanova
Charles University
- 12:50 *Biomimetic polymer in preparation multifunctional nanoparticles*
Radosław Mrówczyński
Univ. Poznań
- 13:10 End of the session



**Network Area 4
Networks and Gels
Room Penkala 2**

May 30, 2018

- 10:00 *Crystallization / Gelation kinetics as a probe of the network topology in thermoplastic elastomers*
Guilhem Baeza
INSA-Lyon
- 10:20 *Multi-technique characterization of ionic elastomers: structure, molecular dynamics and self-healing kinetics*
Anton Mordvinkin
Univ. Halle
- 10:40 *Computational investigation of microgels: effect of the microstructure on the deswelling behavior*
Angel J. Moreno
Univ. San Sebastian
- 11:00 End of the session



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Network Area 4
Rheology
Room Penkala 2

May 30, 2010

- 11:30 *Rheology of aqueous solutions containing Pluronics L64'*
Rossana Pasquino
Univ. Naples
- 11:50 *Nonlinear rheology model for polydisperse polymers*
Victor Boudara
Univ. Leeds
- 12:10 *Diffusive modes for polymer rings in linear polymer matrices*
M.Krutyeva
Forschungszentrum Jülich
- 12:30 *Effect of the nanofiller topology on the dynamics of entangled linear matrices*
Paula Malo de Molina
Univ. San Sebastian
- 12:50 *Dynamic heterogeneities in PVDF/PMMA blends in presence of nanoparticles assessed using mechanical spectroscopy*
Maya Sharma
KU Leuven
- 13:10 End of the session



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Network Area 4
Other
Room Penkala 2

May 30, 2018

- 15:40 *Active polymer/filaments: Effect of hydrodynamics on conformations and dynamics*
Roland Winkler
Forschungszentrum Jülich
- 16:00 *New direct measurement of the layer thickness of adsorbed polymer squeezed by an oil droplet*
Jennifer Fusier
ESPCI
- 16:20 *Mechanical manipulation of director field around colloidal particles within liquid crystal elastomers*
Nina Trbojevic
Univ. Leeds
- 16:40 *Design of biomimetic pseudopeptides to mediate membrane-active processes for intracellular delivery*
Rongjun Chen
Imperial College London
- 17:00 End of the session

38th SoftComp Network Coordination Committee Meeting

May 28, 2018

18:30-20:00

Room Tesla

AGENDA

- | | |
|--|------------|
| 1. Approval of the present agenda | G.Gompper |
| 2. Approval of the minutes of the NCC37 meeting, May 29, 2017, Venice, Italy
(document NCC-38-AD01-FC-v01.pdf) | G.Gompper |
| 3. Check of the actions | F.Carsughi |
| 4. General information on SoftComp year 2016
- Finances
- Applications to the SoftComp programmes
(document NCC-38-AD02-FC-v01.pdf) | F.Carsughi |
| 5. SoftComp selection committees and NCC membership
(document NCC-38-AD03-FC-v01.pdf) | G.Gompper |
| 6. Industrial Liaison Office | G.Gompper |
| 7. International Soft Matter Conference 2019 | W.Poon |
| 8. Educational plan | W.Poon |
| 9. Dissemination plan
- SoftComp Topical Workshop: applications
(document NCC-38-AD04-FC-v01.pdf)
- Annual meeting concept
(document NCC-38-AD05-FC-v01.pdf) | J.Dhont |
| 10. SoftComp communications | A.Wenzik |
| 11. SoftComp/EUSMI Annual meeting 2019
(document NCC-38-AD06-FC-v01.pdf) | F.Carsughi |
| 12. NCC Meeting schedule | G.Gompper |
| 13. AoB | |

14th SoftComp Network Governing Board Meeting

May 29, 2018

18:30-20:00

Room Kravata

AGENDA

- | | |
|---|---------------------------------------|
| 1. Approval of the present agenda | G.Gompper |
| 2. Approval of the minutes of the NGB meeting 14, May 30, 2017, Venice, Italy
(document NGB-15-AD01-FC-v01.pdf) | G.Gompper |
| 3. Check of the actions | F.Carsughi |
| 4. Report on the last SoftComp period
- General information
- SoftComp finances
- Applications to the SoftComp programmes
(document NGB-15-AD02-FC-v01.pdf) | G.Gompper
F.Carsughi
F.Carsughi |
| 5. SoftComp selection committees and NCC membership | G.Gompper |
| 6. Annual meeting concept | J.Dhont |
| 7. International Soft Matter Conference 2019 | W.Poon |
| 8. SoftComp communications | A.Wenzik |
| 9. SoftComp/EUSMI Annual 2019 meeting
(document NGB-15-AD03-FC-v01.pdf) | F.Carsughi |
| 10. AoB | |

SoftComp Network Governing Board Attendance
Update 13 May 2018

FZJ	G.Gompper
Univ. Mainz	P.Virnau
Univ. Göttingen	-
Univ. Cologne	A.Schmidt
Univ. Utrecht	-
Univ. Leeds	P.Beales
Univ. Edinburgh	W.Poon
Kath. Univ. Leuven	E.Koos
Institute Curie	P.Bassereau
CNRS	L.Ramos
Univ. Vigo	-
Univ. Basque Country	J.Colmenero
FORTH	B.Loppinet
Univ. Poznan	A.Patkowski
Schlumberger	-
Unilever	M.Turchi
Rhodia/Solvay	A.C.-Le Gulluche
Imperial College	R.M.Miller
ESPCI	C.Monteux
Univ. Fribourg	-
Cath. Univ. Louvain	-
Univ. Halle	W.Paul
Univ. Wageningen	J.Sprakel
Univ. Lund	S.Ghosh
Univ. Luxembourg	-
T.Univ. Eindhoven	P.Hage
ILL	M.Grimaldo
Univ. Durham	C.Schaefer
CICBiomaGUNE	L.Liz-Marzan
Univ. Tuebingen	F.Zhang
ETH	J.Vermant
Univ. Napoli	R.Pasquino
T.Univ. Darmstadt	-
INSA-Lyon	G.Baeza
Univ. Ca' Foscari	A.Giacometti