

EUTOPIA-1: First meeting of the European Topology interdisciplinary Initiative



Report of Contributions

Contribution ID: 7

Type: **not specified**

WG 2 introduction

Introduction to the scientific agenda of working group II.

Session Classification: Introductions to Eutopia's working groups

Contribution ID: 8

Type: **not specified**

WG 3 introduction

Introduction to the scientific agenda of working group III.

Session Classification: Introductions to Eutopia's working groups

Contribution ID: 9

Type: **not specified**

WG 1 introduction

Tuesday 5 February 2019 14:30 (30 minutes)

Contribution ID: **10**

Type: **not specified**

WG 2 introduction

Tuesday 5 February 2019 15:00 (30 minutes)

Contribution ID: **11**

Type: **not specified**

WG 3 introduction

Tuesday 5 February 2019 16:00 (30 minutes)

Contribution ID: **12**

Type: **not specified**

WG 4 introduction

Tuesday 5 February 2019 16:30 (30 minutes)

Contribution ID: **13**

Type: **not specified**

WG 5 introduction

Tuesday 5 February 2019 17:00 (30 minutes)

Contribution ID: **14**

Type: **not specified**

Social dinner

Contribution ID: 15

Type: **not specified**

General introduction to topology, strings, knots

Wednesday 6 February 2019 09:00 (40 minutes)

Presenter: MOROZOV, Alexei

Session Classification: WG 1 mini-workshop.

Contribution ID: **16**

Type: **not specified**

Hopfions in superconductors

Wednesday 6 February 2019 09:40 (20 minutes)

Presenter: BABAEV , Egor

Session Classification: WG 1 mini-workshop.

Contribution ID: 17

Type: **not specified**

Topological aspects of protein folding

Wednesday 6 February 2019 10:00 (30 minutes)

Presenter: ILIEVA , Nevena

Session Classification: WG 1 mini-workshop.

Contribution ID: **18**

Type: **not specified**

Knots, knot invariants and knots in proteins

Wednesday 6 February 2019 11:00 (30 minutes)

Presenter: SULKOWSKI , Piotr

Session Classification: WG 1 mini-workshop.

Contribution ID: 19

Type: **not specified**

The analytical approach to topological structures in nature: challenges and new perspectives

Wednesday 6 February 2019 11:30 (30 minutes)

Presenter: FERRARI, Franco

Session Classification: WG 1 mini-workshop.

Contribution ID: 20

Type: **not specified**

Round table - forward look for WG 1

Wednesday 6 February 2019 12:00 (30 minutes)

Session Classification: WG 1 mini-workshop.

Contribution ID: **21**

Type: **not specified**

Polymer systems under topological constraints

Wednesday 6 February 2019 14:30 (15 minutes)

Presenter: MILCHEV , Andrey

Session Classification: WG 2 mini-workshop

Contribution ID: 22

Type: **not specified**

Random knotting and linking

Wednesday 6 February 2019 14:45 (15 minutes)

Presenter: ORLANDINI, Enzo

Session Classification: WG 2 mini-workshop

Contribution ID: 23

Type: **not specified**

5x5 minutes talks

Wednesday 6 February 2019 15:00 (30 minutes)

- Jan Smrek, Non-equilibrium Thermally-Induced Phase Separation in Polymers
- Emanuele Locatelli, Overview on Structural and Dynamical Properties of Active Polymers
- Luca Tubiana, Polycatenanes and the Kinetoplast DNA
- Davide Michieletto, Threadings in Systems of Ring and Tadpole Shaped Polymers
- Mark Miller, Coarse-Graining Methods for Molecular and Colloidal Systems

Session Classification: WG 2 mini-workshop

Contribution ID: 24

Type: **not specified**

Round table - forward look for WG 2

Wednesday 6 February 2019 15:30 (30 minutes)

Session Classification: WG 2 mini-workshop

Contribution ID: 25

Type: **not specified**

Patchy polymers: A bridge between synthetic polymers and biopolymers

Wednesday 6 February 2019 16:30 (15 minutes)

Presenter: COLUZZA, Ivan

Session Classification: WG 2 mini-workshop

Contribution ID: 26

Type: **not specified**

Experimental polymer design for drug delivery

Wednesday 6 February 2019 16:45 (20 minutes)

Presenter: PENEVA, Kalina

Session Classification: WG 2 mini-workshop

Contribution ID: 27

Type: **not specified**

4x5 minutes talks

Wednesday 6 February 2019 17:05 (25 minutes)

- Felix Schacher, Modern Polymer Chemistry: From Tailor-made Materials to Lego(c) for Grown-Ups
- Marina Scarpa, Cellulose Nanocrystals as Building Blocks of Entangled Materials
- Pavlos Stefanou, Entanglement Effects in Polymer Melts and Solutions: Where We Stand and What Can Be Done
- Angel Moreno, Simulations of Reversible and Irreversible Complex Polymer Networks: From Gels to Microgels

Session Classification: WG 2 mini-workshop

Contribution ID: 28

Type: **not specified**

Round table - forward look for WG 2

Wednesday 6 February 2019 17:30 (30 minutes)

Session Classification: WG 2 mini-workshop

Contribution ID: 29

Type: **not specified**

WG 3 overview

Thursday 7 February 2019 09:00 (30 minutes)

State of the art, open problems according to the MoU, Possible crosscollaboration with the other WGs. Discussion

Presenter: SULKOWSKA, Joanna

Session Classification: WG 3 mini-workshop

Contribution ID: 30

Type: **not specified**

Knotoids and Protein Structure: A primer on the mathematical theory and the available computational tools.

Thursday 7 February 2019 09:30 (20 minutes)

Presenter: GOUNDAROULIS, Dimos

Session Classification: WG 3 mini-workshop

Contribution ID: **31**

Type: **not specified**

Knots in intrinsically disordered proteins Discussion

Thursday 7 February 2019 09:50 (20 minutes)

Presenter: CIEPLAK, Marek

Session Classification: WG 3 mini-workshop

Contribution ID: 32

Type: **not specified**

Transferable coarsegrained potential for de novo protein folding and design

Thursday 7 February 2019 10:10 (20 minutes)

Presenter: COLUZZA, Ivan

Session Classification: WG 3 mini-workshop

Contribution ID: 33

Type: **not specified**

Deterministic Knots in proteins

Thursday 7 February 2019 11:00 (20 minutes)

Presenter: DABROWSKI-TUMANSKI, Pawel

Session Classification: WG 3 mini-workshop

Contribution ID: 34

Type: **not specified**

Nontrivial lasso in proteins and polymers Discussion

Thursday 7 February 2019 11:20 (20 minutes)

Presenter: GREŃ , Bartosz

Session Classification: WG 3 mini-workshop

Contribution ID: 35

Type: **not specified**

Round table - forward look for WG 3

Thursday 7 February 2019 11:40 (20 minutes)

Session Classification: WG 3 mini-workshop

Contribution ID: **36**

Type: **not specified**

TBA

Thursday 7 February 2019 14:30 (10 minutes)

Presenter: HURLEY, Eoin

Session Classification: WG 4 mini-workshop

Contribution ID: 37

Type: **not specified**

DNA braids

Thursday 7 February 2019 14:40 (10 minutes)

Presenter: FORTE, Giada

Session Classification: WG 4 mini-workshop

Contribution ID: 38

Type: **not specified**

DNA Unknotting via Topoisomerase

Thursday 7 February 2019 14:50 (10 minutes)

Presenter: BARBENSI , Agnese

Session Classification: WG 4 mini-workshop

Contribution ID: 39

Type: **not specified**

Chromatin unknotting

Thursday 7 February 2019 15:00 (10 minutes)

Presenter: STASIAK , Andrzej

Session Classification: WG 4 mini-workshop

Contribution ID: 40

Type: **not specified**

Chromatin & TADs

Thursday 7 February 2019 15:10 (10 minutes)

Presenter: RACKO, Dusan

Session Classification: WG 4 mini-workshop

Contribution ID: 41

Type: **not specified**

TBA

Thursday 7 February 2019 15:20 (10 minutes)

Presenter: MICHELETTI, Cristian

Session Classification: WG 4 mini-workshop

Contribution ID: 42

Type: **not specified**

Nonlinear dynamics of DNA and microtubules

Thursday 7 February 2019 15:30 (10 minutes)

Presenter: ZDRAVKOVIC , Slobodan

Session Classification: WG 4 mini-workshop

Contribution ID: 43

Type: **not specified**

TBA

Thursday 7 February 2019 15:40 (10 minutes)

Presenter: LUCIC, Bojana

Session Classification: WG 4 mini-workshop

Contribution ID: 44

Type: **not specified**

TBA

Thursday 7 February 2019 15:50 (10 minutes)

Presenter: KAPLAN, Noan

Session Classification: WG 4 mini-workshop