Team Retreat and International Workshop 2015

Santorini, Greece

24/06/2015-30/06/2015

 $\textbf{Workshop hours: Session 1}{:}\ 11{:}00\text{-}13{:}00$

Session 2: 15:00-17:00

Day 1 – Wednesday 24/06/2015

Arrival of participants

Day 2 - Thursday 25/06/2015

Workshop: Data Science for Self-regulating Complex Systems

Organizers: Evangelos Pournaras & Iza Moise

Topics: Multi-agent/distributed systems

Ubiquitous/pervasive systems

Collective intelligence

Big Data/Real-time analytics

Complex networks

Crowd-sourcing/citizen science

Domains: social mining, Smart Grids, disaster management, environmental applications, etc.

Preliminary schedule:

Dirk Helbing	Session 1	Opening
Viktoria Spaiser	Session 1	Understanding
		Environmental
		Behavior by
		Combining Big Data
		and A Theory-Based
		Field Experimental
		Approach
Pierpaolo	Session 1	Local Optimization
Mastroianni		Strategies in Urban
		Vehicular Mobility

Open Discussion	Session 1	
Evangelos Pournaras	Session 2	Decentralized
		Regulation &
		Aggregation of
		Information Reveal
		in Nervousnet
Luca Pappalardo	Session 2	Big Data and Real-
		Time Analytics
Open Discussion	Session 2	

Day 3 – Friday 26/06/2015

Workshop: Complex contagion and behavior change

Organizers: Olivia Woolley

Topics: Complex networks

Spreading processes and their interactions

Epidemics behavior and information

Preliminary schedule:

Olivia Woolley	Session 1	Health Behavior
		Change through
		Information Spread:
		Theory
Iza Moise	Session 1	Health Behavior

		Change through
		Information Spread:
		Big Data
Lloyd Sanders	Session 1	Health Behavior
		Change through
		Information Spread:
		The Synthesis
Open Discussion	Session 1	
Fakhteh	Session 2	Co-infection on
Ghanbarnejad		Global Air Traffic
Maximilian Schich	Session 2	Cultural Science
		Transcending the
		Two Worlds and
		Some Forms of
		Resulting Cascades
Giulio Rossetti	Session 2	Network Dynamics
Open Discussion	Session 2	

Day 4 – Saturday 27/06/2015

Workshop: Science of Science / Computational Methods

Organizers: Tobias Kuhn

Topics: Scientific networks

Collaboration Innovation Memes

Engineering the future of publishing (e.g. altmetrics, semantic publishing, nanopublications) High-performance computing with Hadoop

Preliminary schedule:

Tobias Kuhn	Session 1	Semantic Publishing with Nanopublications
Stefano Balietti	Session 1	Online Experiments with nodeGame
Christian Schulz	Session 1	Collaboration 4.0
Open Discussion	Session 1	
Iza Moise	Session 2	Hadoop Tutorial

Day 5 - Sunday 28/06/2015

Activities

Gala dinner

Day 6 - Monday 29/06/2015

Workshop: Collective Intelligence

Organizers: Richard Mann

Topics: Collective cognition
Distributed sensing
Information aggregation
Social interaction rules
Optimal group formation

Ensemble learning Collective task management

Preliminary schedule:

Richard Mann	Session 1	Designing Incentives
Takuto Sakamoto	Session 1	CI in pastoralists
Maksym Romenskyy	Session 1	Self-organisation
		under Bounded
		Confidence: from
		Swarms of Particles
		to Opinion Dynamics
Open problems /	Session 1	
Hacking		
Matthias Leiss	Session 2	Hedge Fund Project
& Christian Schulz		
Stefano Bennati	Session 2	Distributed vs.
		Centralized Decision
		Making under Noisy
		Conditions
Maksym Romenskyy	Session 2	A Fish Turing Test:
		New Approach to
		Model Validation
Open Discussion	Session 2	How do we define CI?

Day 7 – Tuesday 30/06/2015

Workshop: ERC / Cooperation / Homo Socialis

Organizers: Heinrich Nax

Topics: Evolution of cooperation

Mechanism design

Applications (old and new)

Homo Socialis

Historic perspectives from ancient Greece

Preliminary schedule:

Heinrich Nax	Session 1	Mechanism Design and Homo Socialis:
		Perspectives from
		Ancient Greece
Stefano Duca	Session 1	Meritocracy with
		Wealths
Caleb Koch	Session 1	Tullock Contests
Petr Neugebauer	Session 1	Visual
		Communication:
		Logo and Momentum
Open Discussion	Session 1	Evolution of Social
		Structure
Bary Pradelski	Session 2	Rationality from
		Bottom-up
Matthias Leiss	Session 2	State of my PhD
Dirk Helbing	Session 2	Closing
Open Discussion	Session 2	Road ahead