## **Program** Geilo School 2023, 13-23 March Physics of Evolving Matter: Connectivity, Communication and Growth

1 <sup>st</sup> Day Monday	March. 13	
18:00	Arrival	Bus transportation of participants from Oslo airport (14:45) and Oslo central station (14:00) to Geilo
18.00-19.00	Registration	
19.00-20.00	Reception	Welcome Drink in the Bar
20.00 -22.00	Dinner	
22.00-22.15	Arne Skjeltorp	Opening
2 <sup>nd</sup> Day Tuesday		
08:30-11:30	Petter Holme	Models of human interaction
11:30-15:30	Discussions, outdoor activities and lunch	
15:30-17:30	Orlin Velev	Active soft matter controlled and powered by electric and magnetic fields 1. General principles and directed assembly and manipulation
17:30-18:30		Tutorial group meetings and informal discussions with lecturers
3rd Day Wedness	day March 15	
08:30-09:30	Orlin Velev	2. Propulsion of active particles and active matter reconfiguration
09:30- 11:30	Ivan Davidovitch	Inference of network connectivity from neural activity in Neuroscience
11:30-15:30	Discussions, outdoor activities and lunch	
15:30-16:30	Ivan Davidovitch	Inference of network connectivity from neural activity in Neuroscience (Ctd.)
16:30-17:30	Olli Ikkala	From bio-mimetic materials to life-inspired dynamic materials
17:30-18:30		Tutorial group meetings and informal discussions with lecturers
4 <sup>th</sup> Day Thursday	y March 16	
08:30-10:30	Olli Ikkala	From bio-mimetic materials to life-inspired dynamic materials (Ctd.)
10:30-11:30	Vinny Manoharan	Viruses: a perspective from soft-matter physics
11:30-15:30	Discussions, outdoor activities and lunch	
15:30- 17:30	Vinny Manoharan	Viruses: a perspective from soft-matter physics (Ctd.)
17:30-18:30		Tutorial group meetings and informal discussions with lecturers
5 <sup>th</sup> Day Friday M		
08:30-11:30	Stéphane Douady	Morphogenesis of Interconnecting networks 1) examples: cities, rivers, leaves, gorgons, jellyfishes 2) analysis of spatial networks / growth rules 3) morphogenesis and evolution
11:30-15:30	Discussions, outdoor activities and lunch	
15:30-18:30	Poster session	Bardølasalen Posters left on display until Wednesday, March 22

6 <sup>th</sup> Day Saturday	March 18	
08:30- 09:30	Maciej Lisicki	Twist and turn. Elastohydrodynamics of soft and living
		matter
09:30- 10:30	Jarle Breivik	The evolutionary meaning of cancer
10:30- 11:30	Florence Elias	The physics of liquid foams
11:30-15:30	Discussions, outdoor activities	
	and lunch	
15:30-17:30	Florence Elias	The physics of liquid foams (Ctd.)
17:30-18:30		Tutorial group meetings and informal discussions
		with lecturers
7th Day Sunday N	March 19	
Free	Choice of excursions to nearby	
	scenic places or various skiing	
	or hiking events in the mountains	
8 <sup>th</sup> Day Monday	March 20	
08:30- 11:30	L. Mahadevan	1. Embodied Intelligence - from bugs to bots
		2. Motifs in Morphogenesis - from bodies to brains
11:30-15:30	Discussions, outdoor activities	
	and lunch	
15:30-17:30	Min-Hui Li	Soft actuators and artificial muscles by liquid crystal
		elastomers
17:30-18:30		Tutorial group meetings and informal discussions with
		lecturers
9 <sup>th</sup> Day Tuesday	March 21	
08:30- 09:30	Min-Hui Li	Soft actuators and artificial muscles by liquid crystal
		elastomers (Ctd.)
09:30- 11:30	Albert-László Barabási	Network Science
11:30-15:30	Discussions, outdoor activities and lunch	
15:30-16:30	Albert-László Barabási	Network Science (Ctd.)
16:30-17:30	Yves Méheust	Flow-induced constraint drives phenotypic heterogeneity
		in bacterial growth and adhesion on surfaces
17:30-18:30		Tutorial group meetings and informal discussions with
		lecturers
10th Day Wednes	sday March 22	
08:30- 10:30	Françoise Brochard-Wyart	A tour of my soft matter garden
10:30- 11:30	Christophe Eloy	Planktonic navigation
11:30-15:30	Discussions, outdoor activities	
	and lunch	
15:30-17:30	Christophe Eloy	Planktonic navigation (Ctd.)
17:30-18:30		Tutorial group meetings and informal discussions with
		lecturers
19:30	Geilo School Closing Dinner	Geilo Awards, Poster Prizes etc.
11 <sup>th</sup> Day Thursda	ay Nov. March 23	
08:30-12:30	Departure	Bus transportation of participants from Geilo to Oslo
	-	airport (12:30) and Oslo central station (13:30)

Each lecture hour will last for about 50 min including questions and a 10 min break
Coffee breaks approximately 10:15-10:30 and 16:15-16:30