

NTU Winter School on Complexity Science

	Thursday 22-Mar-2018	Friday 23-Mar-2018	Monday 26-Mar-2018	Tuesday 27-Mar-2018	Wednesday 28-Mar-2018	
	Onset of Complexity	Foundation of Complex System	Complexity & Social Systems	Urban Complexity	Health Systems Complexity (HSC)	
08.30 - 09.00 am						
09.00 - 09.30 am	Introduction: Complexity Science <i>Peter M. A. Sloot</i>	Emergence of Power Laws Stefan Thurner	Islands of Order <i>J Stephen Lansing</i>	Tipping Points <i>Siew Ann Cheong</i>	Introduction to HSC <i>Russell Gruen</i>	
09.30 - 10.00 am					Introducing mHealth into health systems. Baby steps or transformation ? <i>Josip Car</i>	
10:00 - 10:30 am	Coffee Break	Coffee Break	Coffee Break	Coffee Break	Coffee Break	
10:30 - 11:00 am	**Growth, Innovation, Sustainability and the Accelerating Pace of Life from Cells to Cities <i>Geoffrey West</i>	Non-Linear System Response: From Chaos to Complexity <i>Colm Connaughton</i>	Collective Emotions in Cyberspace <i>Janusz Holyst</i>	Urban Data Analytics <i>Markus Schlaepfer</i>	System Dynamics of Healthcare <i>John P. Ansah</i>	
11:00 - 11:30 am						
11:30 - 12:00 pm	Reducing Complexity with Quantum Mechanics <i>Mile Gu</i>	Self Organized Criticality <i>Lock Yue Chew</i>	Complexity & Shift in Modern Science <i>W. Brian Arthur</i>	Urban Mobility Under Strain <i>Chris Monterola</i>	The Complexity of Health & Diseases: Viral & Social Epidemics <i>Peter M. A. Sloot</i>	
12:00 - 12:30 pm						
12:30 - 02:00 pm	Lunch					
02:00 - 02:30 pm	Introduction NetworkX <i>Michael Lees</i>	Robustness NetworkX <i>Michael Lees</i>	Spreading Phenomena NetworkX <i>Michael Lees</i>	Introduction: Agent Based Modelling <i>Michael Lees</i>	Student Presentations	
02:30 - 03:00 pm						
03:00 - 03:30 pm						
03:30 - 04:00 pm	Coffee Break					
04:00 - 04:30 pm	Introduction NetworkX <i>Michael Lees</i>	Robustness NetworkX <i>Michael Lees</i>	Spreading Phenomena NetworkX <i>Michael Lees</i>	Viral Marketing NetworkX <i>Feng Ling</i>	Wrapping up	
04:30 - 05:00 pm						
05:00 - 05:15 pm						
05:15 - 06:00 pm	Cocktail					
06:00 - 08:00 pm	Welcome Dinner cum Celebration of Complexity Institute's new office*	End	End	End	End	

* Venue: ABN Level 1

**Geoffrey West's lecture has been brought forward from 27 to 22 March due to his tight schedule

Lecture	Practical	Break
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updated: 20 Mar 2018

* subject to change