

# The Physics of Complex Systems

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School of Physical and Mathematical Sciences

Date: 20 February 2022 (Sunday)  
Time: 1.30pm - 2.30pm  
Venue: NTU SPMS LT1



## Abstract

In this talk, I will describe what is a complex system, why it is important to study and investigate complex system and give real-world examples of complex system. Complex system spans a great diversity of fields, encompassing the field of biology, economics, neuroscience, environmental science, social science, computer science, and engineering. To unravel complex systems, physicists have a unique way of uncovering organizing principles and universal behaviour that underlie the systems. I will show the key discoveries of physicist and current research in this respect, and then forecast on the potential future contribution that may arise from this exciting field.

## Biography

Assoc Prof Chew Lock Yue is with the School of Physical and Mathematical Sciences NTU. He obtained his Ph.D. degree in Theoretical Physics from National University of Singapore. His research interest is in the fundamental physical mechanisms and organization principles within complex systems and their dynamics, where he had performed extensive research through the paradigm of statistical and nonlinear physics. His current research focuses are on the forecasting and nowcasting of complex systems; machine-learning applications in complex systems; and causal modelling of complex systems.

Stay in touch!  

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