



Some New Directions in Online Structure Theory

Rod Downey
Victoria University of Wellington

Time: 10:00AM (Time in Beijing)
3:00PM (Time in Auckland)
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Venue: 518B, Research Building 4
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Abstract: I will report on some recent research giving a general framework for algorithmics on online structures. Currently there are many algorithms and no theoretical basis for this area. Tractability of questions highlight the need for appropriate parameterizations such as my early work with C. McCartin, and algorithmic structure of the presentations such as the recent works of Askes (my current student) and my work joint with Bajenov, Khalimulin, and Melnikov.

Speaker Bio: Professor Rod Downey contributed significantly to the modern development of theoretical computer science and logic. Professor Downey is a co-founder of parameterized complexity theory. He is known for his outstanding work in computability and complexity. His work has been recognized through various prizes and fellowships. Rod is an ACM fellow, AMS fellow, and a fellow of Royal Society of New Zealand. He is a co-winner of EATCS Nerode prize, Humboldt prize, and Shoenfield prize. He is the first New Zealand based mathematician and computer scientists to give an invited lecture at the international congress of Mathematicians. In 2018, Downey was awarded Rutherford medal, the highest honor awarded by the Royal New Zealand Society. The same year Rod presented the Godel lecture on algorithmic randomness.

Chengdu Algorithms and Logic Seminar is a series of online seminars organized by School of Computer Science and Engineering, University of Electronic Science and Technology of China, and School of Computer Science, University of Auckland that aims to promote collaborations in a broad range of topics in algorithms and logic.

Organizers: Bakhadyr Khossainov, Jiamou Liu, and Mingyu Xiao
Email: bmk@uestc.edu.cn (Bakhodyr Khossainov); myxiao@gmail.com (Mingyu Xiao)