Departmental Seminar

Thinking with Visualizations, Fast and Slow

4:30 p.m. – 5:30 p.m. | November 15, 2018 (Thursday)
Rm 813, 8/F, The Jockey Club Tower | Centennial Campus | The University of Hong Kong

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Abstract
Your visual system evolved and developed to process the scenes, faces, and objects of the natural world. You then adapt that same system to process the artificial worlds of graphs, diagrams, data visualizations. This adaptation can lead alternatively to fast and powerful – or deeply slow and inefficient – visual processing. I'll demonstrate these capacity limits using interactive visual tasks, especially those limits that arise when we extract structure and meaning from artificial displays. Understanding these constraints leads to guidelines for STEM pedagogy and display design, and opens new questions for basic research on visual thinking.

About the speaker
Steven Franconeri is a Professor of Psychology at Northwestern, and Director of the Northwestern Cognitive Science Program. His research is on visual thinking, visual communication, and the psychology of data visualization. He directs the Visual Thinking Laboratory, where a team of researchers explore how leveraging the visual system - the largest single system in your brain - can help people think, remember, and communicate more efficiently. His undergraduate training was in computer science and cognitive science at Rutgers University, followed by a Ph.D. in Experimental Psychology from Harvard University, and postdoctoral research at the University of British Columbia. His work on both Cognitive Science and Data Visualization has been funded by the National Science Foundation, the Department of Education, and the Department of Defense. He has received a National Science Foundation CAREER award, a Psychonomic Society Early Career award, and a Cattell Sabbatical award for his research on visual thinking.