Interdisciplinary research the focus at international mathematics and science conference at Laurier's Waterloo campus

More than 350 leading researchers and scholars from multiple disciplines gathered at Laurier's Waterloo campus for the Applied Mathematics, Modelling and Computational Science (AMMCS) conference from Aug. 20 to Aug. 25. The conference aimed to cultivate interdisciplinary research involving mathematical and computational sciences while highlighting recent advances in the field within the international community.

The 2017 AMMCS conference marks the fourth time Laurier's Department of Mathematics has hosted the event. The conference is organized in cooperation with professional societies such as the Society for Industrial and Applied Mathematics (SIAM) and the Fields Institute. Colleagues from across North America and student volunteers also offered organizational support for the event.

"The conference is a testament to Laurier's expertise and important role in mathematical, statistical and computational sciences," said Laurier Mathematics Professor Roderick Melnik, a Canada Research Chair in Mathematical Modelling and co-organizer of the event. "The sessions of the conference covered a wide range of interdisciplinary topics, bringing together leading researchers from academia, industrialists and practitioners from around the world to present their results and to foster interdisciplinary collaborations required to meet the challenges of modern science, technology and society."

The 2017 AMMCS conference program featured approximately 40 special and contributed sessions in several parallel tracks, nine one-hour plenary presentations and three semi-plenary and award speakers. Topics addressed included complex data analysis in health sciences, industrial and financial mathematics, computational number theory, mathematical models in nanoscience and nanotechnology, fractional calculus, game theory, mathematical neuroscience and statistical equilibrium in economics.

The conference also featured the Kolmogorov-Weiner award-winning lecture by Professor Ben Adcock of Simon Fraser University. The award supports innovative interdisciplinary research carried out by researchers at an early stage of their career in the areas of mathematical, natural and applied sciences. Adcock's lecture addressed the sparse polynomial approximations of high-dimensional functions and their applications in science and engineering.

The fifth congress of the AMMCS conference is scheduled for August 2019. Please contact Roderick Melnik or Marc Kilgour for more information.