



# Member Profile

## Dr. Christina Stoica, Affiliated Member

Dr. Christina Stoica, affiliated member of the Institute, advances research within two priority research themes of the Institute. The themes are Mechanics and Materials Science (Tecton 3) and Ecology, Climate and Environmental Sciences (Tecton 5).

She joined the Institute in 2014. In 2005, she came to Wilfrid Laurier University where she is now a professor for the Department of Mathematics. Prior to coming to Laurier, she was a lecturer at Imperial College London, a postdoctoral fellow at the University of Surrey in the United Kingdom and before then a visiting assistant professor at Texas Tech. Dr. Stoica received her PhD in Applied Mathematics from the University of Victoria in British Columbia. She also earned a Doctor in Science degree in Astronomy from the Romanian Academy of Sciences.

Dr. Stoica received the Wilfrid Laurier University Faculty Association Merit Award in 2013. She also received the Recognition Award from the Astronomical Institute of the Romanian Academy of Sciences in 2008. Besides the MS2Discovery Institute, she is also a member of the Canadian Mathematics Society and the Canadian Applied and Industrial Mathematics Society.

At present, she is an editor for the Romanian Astronomical Journal. Her main research interests lie in the role of symmetry in dynamical systems with a focus on mechanical systems. She is also focused on dynamics of Lagrangian, Hamiltonian and Poisson systems, symmetry and reduction, stability and control. Particular applications are in celestial mechanics, space dynamics, and ideal fluids. Dr. Stoica's research is supported by a Natural Sciences and Engineering Research Council Discovery Grant.



Dr. Stoica welcomes inquiries from potential students. She has Research Assistantship opportunities for both undergraduate and graduate students. She has current projects in vortex dynamics, dynamics of space and underwater vehicles and various models of  $n$  - body problems. She has supervised numerous undergraduate and graduate students.