

Thesis Seminar

Speaker

**Ms. Nataliia Poltavets,
Memorial University**

**Thursday, February 28, 2019
1p.m., HH-3017**

The equivalence group of one-dimensional shallow water equations

Abstract:

In this talk I will introduce an algebraic method for finding equivalence groups. This method is the extended version of the algebraic method for computing the complete point symmetry group of a system of differential equations. Two versions of the method, where the first involves the automorphism group of the equivalence algebra and the second is based on a list of its megaideals, were presented in the joint works of Alexander Bihlo and Roman O. Popovych. I will illustrate the computations of the equivalence group of one-dimensional shallow water equations using the automorphism based version of the method.