

# Geometry Seminar

**Tom Baird,  
Memorial University**

**Wednesday, February 13<sup>th</sup>, 2013  
HH-3013, 4:00p.m.**

*Symplectic geometry and quantum field theory III:  
Topology of symplectic quotients.*

**Abstract:**

This is the third of a series of lectures on symplectic geometry, Hamiltonian actions and topological quantum field theory. This talk will explain the process of Hamiltonian reduction, by which symmetries of a phase space can be "modded out" to produce a lower dimensional phase space called the symplectic quotient. We will also explore the rich topological relationship between the initial phase space and its quotient.