

# HONOURS SEMINAR

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## Finite Subgroups of $SO(3)$

Thursday, April 12, 2018

3:30 p.m.

Mathematics and Statistics Lounge  
CW307.20

**Abstract:**

Using a counting argument of on orbits and stabilizers. We see that the only possible finite subgroups of  $SO(3)$  that we can have are isomorphic to either a Cyclic group, a Dihedral group or the symmetry group of one of 5 regular solids. We will utilize theory such as the Orbit-Stabilizer Theorem and the hammer of the entire argument; Burnside's Lemma.