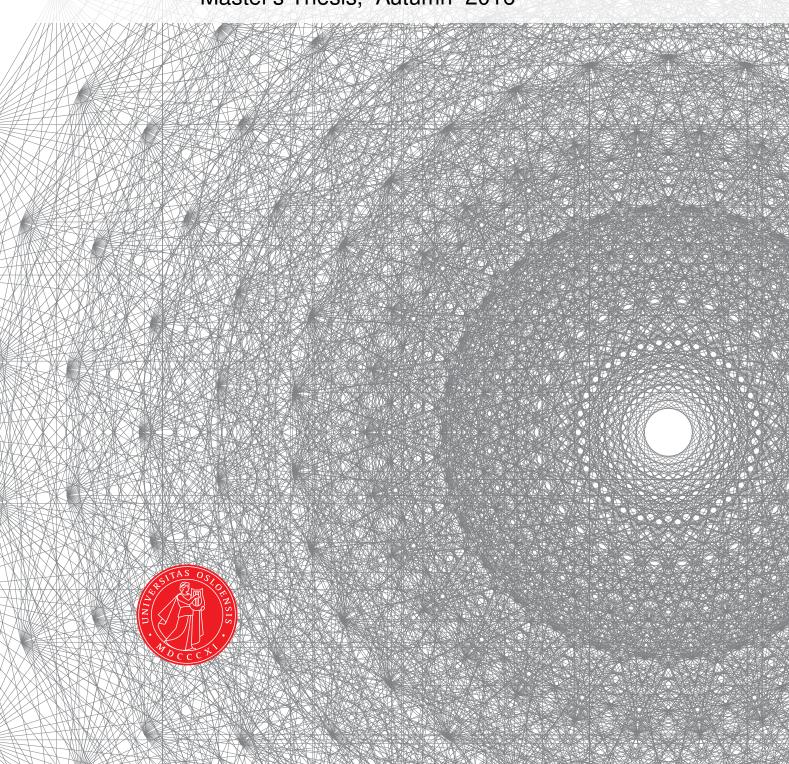
UiO Department of Mathematics University of Oslo

Comparing quasistatic and dynamic models in heart mechanics

Krister Stræte Karlsen Master's Thesis, Autumn 2016



This master's thesis is submitted under the master's programme *Computational Science and Engineering*, with programme option *Computational Science*, at the Department of Mathematics, University of Oslo. The scope of the thesis is 30 credits.

The front page depicts a section of the root system of the exceptional Lie group E_8 , projected into the plane. Lie groups were invented by the Norwegian mathematician Sophus Lie (1842–1899) to express symmetries in differential equations and today they play a central role in various parts of mathematics.