Since antiquity, geometry has proven to be very fertile soil, which has produced countless intellectual breakthroughs. Not the least of these breakthroughs came in the late 19th century, when Poincare resurrected and refined a geometric approach to problems of mechanics and dynamics. The aim of this talk is to discuss some of this history, and work through a couple of examples to explore the modern treatment of differential equations via geometric methods.

Refreshments will be served before the talk in AX24A