Undergraduate Math Club
Winter 2007
2nd floor Nesbitt Common Room
Thursday, April 12, 4:10-5:00pm
(free pizza and pop, as always)

The Case of the Dead Water-skier and a Wake

Professor Gavin LaRose

Abstract

In this talk we consider a mathematical model for the recreational exercise of water-skiing: that is, given control over the path of a towboat, we seek to model the path of the water-skier. To facilitate analysis we assume that the water-skier is unable to influence the direction in which she moves (that is, is dead), and we then investigate the effect of different choices of the boat's motion and other physical effects such as the boat's wake. For the less morbid, an inner tube will be substituted for the water-skier.