



THE UNIVERSITY OF QUEENSLAND

SPS, Mathematics

SEMINAR

Speaker: Dr Stephan Tillmann
The University of Melbourne

Title: Algorithmic geometry and topology

Time: 2:00pm Wednesday, 5/11/08

Venue: Priestley #67-141

Abstract:

I will first describe some central questions in the study of manifolds and explain how they can be addressed using constructive methods. I shall then outline some practical algorithms which arise in my work. They lead to new topological results and have ramifications in complexity theory and group theory. No prior knowledge of topology and geometry will be assumed, and I will set the stage by recalling the main results regarding surfaces from the 19th century.