

2013/2014
**Seminar
Series**

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**The Mystery of the Missing
Lower Bound**

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Consider almost any NP-hard problem, for example the Travelling Salesman Problem. Given a set of cities and the cost to travel between any pair of them, what is the shortest tour that goes thru each city once only, and returns to the starting city?

The fastest algorithm I know to solve TSP with minimum cost requires exponential time. The best lower bound of the time required to solve TSP that I know, is low order polynomial. Why such a big difference between the upper and lower bounds on how long it takes to solve such a problem?

This talk will discuss several other problems and what I know about finding lower bounds.

This talk is suitable for undergraduates. Graduate students and professors are also encouraged to attend.

Wednesday, October 23th @ 3:30pm
Information Technology Centre, ITC317