

# MANY CHEERFUL FACTS

presents

## Simplicial Sets: Better Than the Average Bear

a talk by Joel Kammnitzer

12:10 pm - 1:00 on Wednesday, April 20th, in room  
1015.

Simplicial sets are similar to simplicial complexes in that they can be used to give combinatorial models for topological spaces. However, they are more flexible and have interesting generalizations to other contexts. I will explain their definition, some basic examples, and why they are useful. The talk should be accessible to anyone who knows notions from undergraduate algebraic topology, such as fundamental group and simplicial complexes.

*I am the very model of a modern Major General,  
I've information vegetable, animal, and mineral,  
I know the kings of England, and I quote the fights historical  
From Marathon to Waterloo, in order categorical;  
I'm very well acquainted, too, with matters mathematical,  
I understand equations, both the simple and quadratical,  
About binomial theorem I'm teeming with a lot o' news,  
With many cheerful facts about the square of the hypotenuse!*

- Gilbert & Sullivan  $P \circ P$