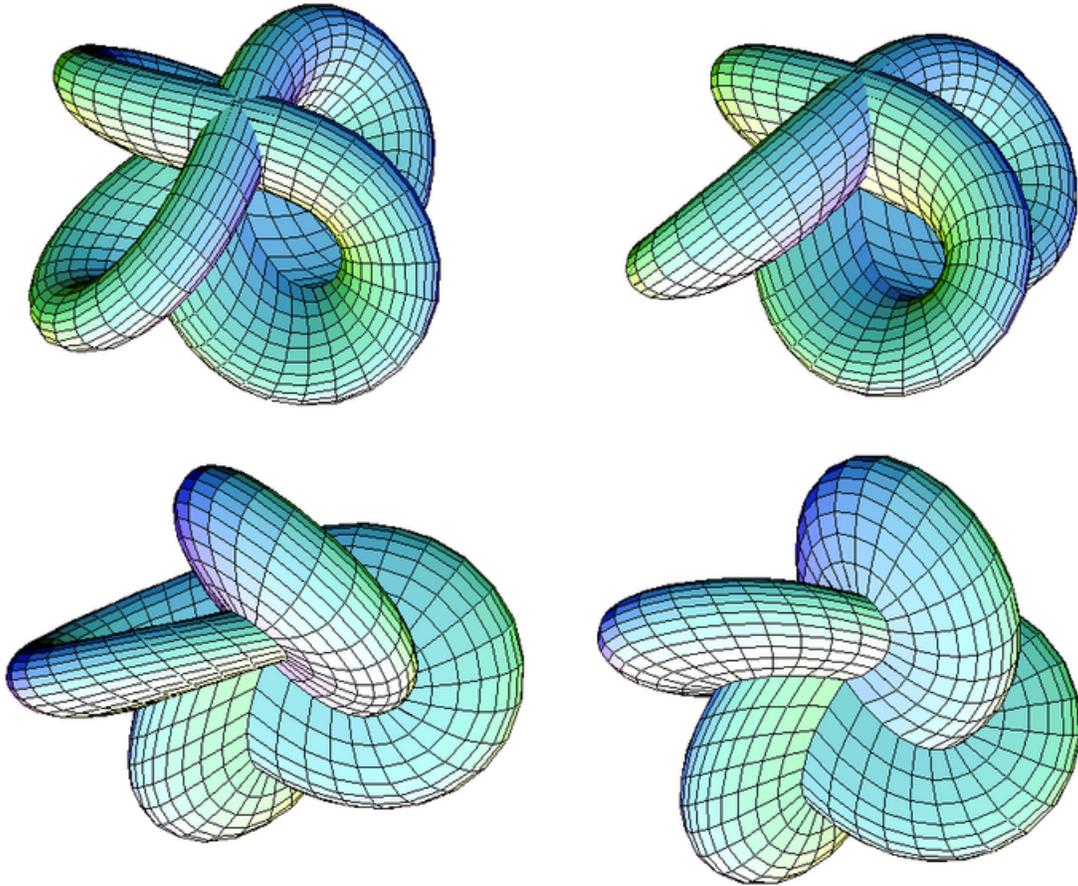


# Ralph Cohen

## The topology of strings, loops, and Riemann surfaces



**Abstract:** In this talk I will describe recent work on the structure of spaces of paths, loops, and surfaces mapping to manifolds. These are function spaces that themselves can be considered as infinite dimensional manifolds. The recent discovery of this structure was inspired by formalisms in physics, but it is purely topological. Techniques from both algebraic and differential topology are used to study this structure. I will discuss these techniques, as well as applications of the theory and some open questions.

Monday, October 9, 2006, 12:10–1:10pm, 383N

*refreshments will be provided*

<http://math.stanford.edu/~emalm/fars/>