## Katherine Stevenson, California Institute of Technology

## ``Fundamental groups in positive characteristic''

## April 8, 1999

``Cut and Paste" arguments are a common tool used to understand fundamental groups of curves over the complex numbers. I will discuss such arguments in the classical setting and then explain their analogues in positive characteristic. Cutting and pasting includes simple techniques over Zariski patches, and more sophisticated tools such as Grothendieck's Existence Theorem and Formal Patching.

I hope to mention several recent, and not so recent, results which have been proved by cutting and pasting. For example, the proof (by Harbater and Raynaud) of the Abhyankar Conjecture relied in large part on such techniques.