1037-57-327 **Ilya Kofman*** (ikofman@math.csi.cuny.edu), Department of Mathematics, 1S, 2800 Victory Boulevard, New York, NY 10314, and **Abhijit Champanerkar** and **Neal Stoltzfus**. *Invariants of graphs on surfaces.*

Oriented ribbon graphs are graphs embedded in oriented surfaces such that faces are discs. A quasi-tree of a ribbon graph is a spanning subgraph with one face, described by an ordered chord diagram. We discuss two results that follow from our generalization of Tutte's concept of activity to quasi-trees:

1. We extend the spanning tree expansion of the Tutte polynomial to a quasi-tree expansion of the Bollobas-Riordan-Tutte polynomial.

2. For any link diagram L, there is a ribbon graph whose quasi-trees generate the Khovanov homology of L. (Received February 05, 2008)