1042-55-68 **Kristine Bauer*** (kristine@math.ucalgary.ca), Department of Mathematics & Statistics, University of Calgary, 2500 University Dr., Calgary, AB T3L 2W9, Canada, and **Laura Scull**, Department of Mathematics, Fort Lewis College, Durango, CO 81301. *Spectral sequences of operad algebras.*

It is a standard tool of spectral sequences to use product structures as an aid in calculations. What makes this possible is that it is well-understood when a spectral sequence is compatible with the algebraic structure present – when a product structure on an E_2 page of a spectral sequence will result in a product on the E_∞ page.

We extend this to more general types of operations. Such operations are often described using the language of operads - structures which encode a set of operations and their composition laws. In this talk, we present conditions under which an action of an operad on the E_2 page of a spectral sequence passes to the the E_∞ page. These conditions generalize the conditions for algebras, and cover several classes of interesting examples. (Received August 07, 2008)