Noel Brady* (nbrady@math.ou.edu), Department of Mathematics, University of Oklahoma, Norman, OK 73019, and Max Forester. High dimensional isoperimetric functions of groups.

I will discuss recent progress on the problem of determining the coarse structure of the k-dimensional isoperimetric spectrum, for k > 1. This spectrum is the set of expenents "s" for which the function x^s is the k-dimensional Dehn function of a group. Such functions describe the optimal k-dimensional isoperimetric inequality that holds in any model for the group. This is joint work with Max Forester. (Received September 26, 2006)