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**Thomas W. Tucker\*** (ttucker@mail.colgate.edu), Mathematics Department, Colgate University, Hamilton, NY 13346. *Genus parameters and sizings of finite groups*. Preliminary report.

A setting is suggested for the study of genus (and other) parameters for finite groups. A *sizing* of finite groups,  $\sigma$ , assigns to each group a nonnegative integer such that if  $G$  is a subgroup of  $H$ , then  $\sigma(G) \leq \sigma(H)$ . Order, genus (all kinds), number of subgroups, Albertson-Boutin isometry dimension are sizings; rank, length of central series are not. As an example, the minimum Betti number over all Cayley graphs of a group is a sizing with gaps at  $p + 1$  for all odd primes  $p$ . Asymptotics for comparing sizings  $\sigma$  and  $\tau$  is viewed in terms of the accumulation points of the set of rational numbers  $\sigma(G)/\tau(G)$ , where  $\tau(G) \neq 0$ . (Received February 17, 2005)