Yuval Roichman\* (yuvalr@math.biu.ac.il), Department of Mathematics, Bar-Ilan University, 52900 Ramat-Gan, Israel. Symmetric Group Characters and Applications.

Old and recent formulas and bounds for the characters of the symmetric group will be surveyed. Various combinatorial, probabilistic and graph theoretical applications will be given, with a focus on graph expansion. (Received September 18, 2007)