

GOLOD AND MINIMALLY NON-GOLOD MOMENT-ANGLE COMPLEXES

PIOTR BEBEN

ABSTRACT. Given a simplicial complex K with n vertices, the moment-angle complex $Z_K(D^2, S^1)$ is a certain subcomplex of $(D^2)^n$ defined purely in terms of K . Despite their simple description, they have connections with various areas of mathematics, while at the same time their topology is very intricate. We will discuss several general results and techniques concerning their homotopy type, particularly for the case of Golod and minimally non-Golod K .

SCHOOL OF MATHEMATICS, UNIVERSITY OF SOUTHAMPTON, SOUTHAMPTON SO17 1BJ, UNITED KINGDOM
E-mail address: P.D.Beben@soton.ac.uk