Antonia E. Cardwell* (antonia.cardwell@millersville.edu), Department of Mathematics, Millersville University of Pennsylvania, P.O. Box 1002, Millersville, PA 17551. Some constructive proofs of Bollobás' Extension to the Bishop-Phelps Theorem for the spaces C(K) and c_0 .

Constructive proofs of Bollobás' result for the real spaces C(K), where K is a compact set in a Banach space, and c_0 will be presented in this session. In 1961 E. Bishop and R. R. Phelps proved that every real Banach space is subreflexive; in other words, every functional can be approximated by a norm-attaining functional of the same norm. In 1970, B. Bollobás refined the result to show that if f is a norm one functional that "almost" attains its norm at a point x then f can be approximated by a norm attaining norm one functional that attains its norm at a point close to x. The original proof of the Bishop-Phelps result is an existence argument and the exact structure of the norm-attaining functional is not given. One possible structure will be examined in each of the above-mentioned spaces. (Received September 16, 2007)