Meeting: 1003, Atlanta, Georgia, SS 22A, AMS Special Session on Spaces of Vector-Valued Functions, I

1003-46-948 G. Androulakis, K. Beanland and F. Sanacory^{*} (sanacory@math.sc.edu), Department of Mathematics, University of South Carolina, Columbia, SC 29201, and S. J. Dilworth. *Embedding* ℓ_{∞} into the Space of all Operators on Certain Banach Spaces. Preliminary report.

We give sufficient conditions on a Banach space X which ensure that ℓ_{∞} embeds in $\mathcal{L}(X)$, the space of all operators on X. We say that a basic sequence (e_n) is quasisubsymmetric if it dominates all of its subsequences, and for every sequence (I_n) of intervals of positive integers with $\max(I_n) < \min(I_{n+1})$ there exists a sequence (m_n) with $m_n \in I_n$ such that (e_{m_n}) dominates (e_{k_n}) for all (k_n) satisfying $k_n \in I_n$. One of our main results is that if a Banach space X has a seminormalized quasisubsymmetric basis then ℓ_{∞} embeds in $\mathcal{L}(X)$. (Received October 01, 2004)