1024-42-136 **Marshall Ash** (mash@condor.depaul.edu) and **Laura De Carli*** (decarlil@fiu.edu). *Growth of L^p Lebesgue constants for convex polyhedra and other regions.* Preliminary report.

For any convex polyhedron W in $\mathbf{R}^m$, $p > 1$, and $N \geq 1$, there are constants $C_1(W, p, m)$ and $C_2 W, p, m)$ such that

$$C_1 N^{m(p-1)} \leq \int_{(-1,1)^m} \left| \sum_{k \in NW} e(k.x) \right|^p dx \leq C_2.$$

Similar results hold for more general regions. (Received January 05, 2007)