1096-46-977 **S J Dilworth*** (`dilworth@math.sc.edu`) and **B Randrianantoanina**. *Almost transitive and maximal norms in classical Banach spaces.* Preliminary report.

We prove that the spaces ℓ_p, $1 < p < \infty, p \neq 2$, and all their infinite-dimensional subspaces do not admit equivalent almost transitive renormings. This answers a problem posed by Deville, Godefroy and Zizler in 1993. We obtain this as a consequence of a new property of almost transitive spaces with a Schauder basis, namely we prove that in such spaces the unit vector basis of ℓ_2^2 belongs to the two-dimensional asymptotic structure and we obtain some information about the asymptotic structure in higher dimensions.

We also prove that the spaces ℓ_p, $1 < p < \infty$, $p \neq 2$, have continuum different renormings with 1-unconditional bases each with a different maximal isometry group, and that every 1-symmetric space other than ℓ_2 has at least a countable number of such renormings. On the other hand we show that the spaces ℓ_p, $1 < p < \infty$, $p \neq 2$, have continuum different renormings each with an isometry group which is not contained in any maximal isometry group of a renorming of ℓ_p. This answers a question of Wood. (Received September 11, 2013)