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W. W. Comfort\* (wcomfort@wesleyan.edu), Department of Mathematics, Wesleyan University, Middletown, CT 06459, and Jan van Mill (vanmill@cs.vu.nl), Faculteit Exacte
Wetenschappen, Vrije Universiteit, De Boelelaan 1081A, 1081 HV Amsterdam, Netherlands.
Extremal Pseudocompact Abelian Groups Are Compact Metrizable.

The theorem announced in the title is proved. It may be restated as follows. Theorem. Let G be a pseudocompact Abelian group such that  $w(G) > \omega$ . Then G admits both (a) a proper dense pseudocompact subgroup and (b) a strictly finer pseudocompact group topology. Remark. Absolutely essential to the present arguments are theorems proved earlier by the authors and their co-authors K. A. Ross, L. C. Robertson, H. Gladdines and J. Galindo. (Received September 26, 2005)