1120-52-123 **Alexandru Chirvasitu***, University of Washington, Department of Mathematics, Box 354350, Seattle, WA 98195-4350. *Parkable convex sets and finite-dimensional Hilbert spaces.*

A convex subset C of a convex set $B \ni 0$ in a Euclidean space is said to be parkable in B if the latter contains a translate of C containing 0.

We give a characterization of ellipsoids in $\mathbb{R}^n$ in terms of the parkability of their convex subsets, proving a conjecture of G. Bergman.

The proof relies on the realization of centrally symmetric convex bodies as unit balls of Banach spaces, together with characterization due to Kakutani of Hilbert spaces as Banach spaces admitting an involution on their lattice of closed subspaces. (Received February 17, 2016)

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