Marek Wójtowicz The lattice copies of ℓ_1 in Banach lattices

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Abstract: It is known that a Banach lattice with order continuous norm contains a copy of ℓ_1 if and only if it contains a lattice copy of ℓ_1 . The purpose of this note is to present a more direct proof of this useful fact, which extends a similar theorem due to R.C. James for Banach spaces with unconditional bases, and complements the c_0 - and ℓ_∞ -cases considered by Lozanovskii, Mekler and Meyer-Nieberg.

Keywords: Banach lattice, order continuous norm, embedding of ℓ_1

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