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Slicely Countably Determined Banach Spaces

We introduce the class of slicely countably determined Banach spaces which contains in particular all spaces with the Radon-Nikodým property and all spaces without copies of ℓ_1 . We present many examples and several properties of this class. We give some applications to Banach spaces with the Daugavet and the alternative Daugavet properties, lush spaces and Banach spaces with numerical index 1. In particular, we show that the dual of a real infinite-dimensional Banach space with the alternative Daugavet property contains ℓ_1 and that operators which do not fix copies of ℓ_1 on a space with the alternative Daugavet property satisfy the alternative Daugavet equation.