1163-03-968

Johanna Franklin^{*} (johanna.n.franklin@hofstra.edu), Department of Mathematics, Room 306, Roosevelt Hall, Hofstra University, Hempstead, NY 11549, and Alexander Melnikov and Dan Turetsky. The complexity of the index set of Banach spaces isomorphic to C[0, 1].

The complexity of the index set of the computably presented Banach spaces that are isomorphic to C[0, 1] can be crudely bounded by Σ_1^1 ; Brown had demonstrated that an arithmetical bound could be obtained if the signature for Banach spaces was extended. Here, we show that there is a Δ_5^0 isomorphism between any computable presentation of C[0, 1] and the standard presentation using only the usual signature plus addition, giving us a tighter bound on the complexity of this index set. (Received September 14, 2020)