Florent Baudier, Gilles Lancien and Pavlos Motakis*, pmotakis@illinois.edu, and Thomas Schlumprecht. On the coarse geometry of the class of asymptotic $c_0$-spaces.

The property of being an asymptotically-$c_0$ Banach spaces is defined in terms of normed linear spaces. We present the somewhat unexpected result that the class defined by the reflexive spaces with this property is coarsely rigid. This means that if $X$ is coarsely embedded into a space in this class then $X$ belongs to this class as well. We additionally prove the less surprising result that there is no separable coarsely universal space for this class. In particular, if $X$ coarsely contains all reflexive asymptotic-$c_0$ spaces then $X^4$ is coarsely universal for all separable metric spaces. (Received February 04, 2019)