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**Montanucci** and **Luciane Quoos**. *Pure gaps on curves with many rational places.*

We consider the algebraic curve defined by  $y^m = f(x)$  where  $m \geq 2$  and  $f(x)$  is a rational function over  $\mathbb{F}_q$ . We extend the concept of pure gap to **c**-gap and obtain a criterion to decide when an  $s$ -tuple is a **c**-gap at  $s$  rational places on the curve. As an application, we obtain many families of pure gaps at two rational places on curves with many rational places. We present the parameters of codes constructed using our families of pure gaps. (Received September 18, 2018)