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Hema Srinivasan* (srinivasanh@missouri.edu), Department of Mathematics, University of Missouri, Columbia, MO 65211. *A class of Gorenstein monomial curves.*

This is a joint work with Philippe Gimenez. Let k be an arbitrary field. We strengthen the criterion of Brezinsky for Gorenstein monomial curves and use it to construct a class of monomial Gorenstein curves. In particular, we show that if a sequence of relatively prime positive integers $\mathbf{a} = (a_1, a_2, a_3, a_4)$ defines a Gorenstein non complete intersection monomial curve $\mathcal{C}(\mathbf{a})$ in \mathbb{A}_k^4 , then there exist two vectors \mathbf{u} and \mathbf{v} such that $\mathcal{C}(\mathbf{a} + t\mathbf{u})$ and $\mathcal{C}(\mathbf{a} + t\mathbf{v})$ are also Gorenstein non complete intersection affine monomial curves for almost all $t \geq 0$. (Received February 18, 2016)