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Adam Nyman* (nymana@mso.umt.edu), University of Montana, Department of Mathematical Sciences, Math Building, Missoula, MT 59812. *Invariants of arithmetic noncommutative \mathbb{P}^1 s*. Preliminary report.

Let $k \subset K$ be an extension of fields. An arithmetic noncommutative \mathbb{P}^1 is a noncommutative space of the form $\text{Proj}S(V)$, where V is a free rank 2 k -central two-sided vector space over K and $S(V)$ is the noncommutative symmetric algebra associated to V . We describe isomorphism invariants, related to Hilbert polynomials, of certain arithmetic noncommutative \mathbb{P}^1 s. (Received September 19, 2005)