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Adam Van Tuyl* (avantuy1@lakeheadu.ca), Department of Mathematical Sciences, Lakehead University, Thunder Bay, ON P7B5E1, Canada, and **Stefan Tohaneanu**. *The minimum distance of linear codes and fat points.*

Let $A(Z)$ be the generating matrix of some linear code with parameters $[s, n + 1, d]$ over an arbitrary field K . I will describe how to associate to $A(Z)$ a set of fat points in $Z \subseteq \mathbb{P}^n$. I will then show that d , the minimal distance of the code, is bounded below by specific shifts in the graded minimal free resolution of I_Z , the defining ideal of Z . We give better bounds in the case that the support of Z is a complete intersection. This is joint work with Ștefan O. Tohăneanu (Western). (Received January 18, 2012)