1096-11-1440 **Michael Filaseta*** (filaseta@math.sc.edu), Mathematics Department, University of South Carolina, Columbia, SC 29208. *The genus behind Hilbert's Irreducibility Theorem and/or a connection of this theorem to Linnik's result on the smallest prime in an arithmetic progression.*

One can take advantage of results associated with the genus of curves to explain Hilbert's Irreducibility Theorem in the form: if $f(x, y)$ is an irreducible polynomial in $\mathbb{Z}[x, y]$ of degree at least 1 in x, then there are infinitely many integers $y_0 \in \mathbb{Z}$ such that $f(x, y_0)$ is irreducible over $\mathbb{Q}$. This explanation will be elaborated on or the speaker may decide to talk instead on a connection that Linnik's theorem, on the smallest prime in an arithmetic progression, has with estimating the smallest $y_0 \in \mathbb{Z}^+$ such that $f(x) + y_0 g(x)$ is irreducible in $\mathbb{Z}[x]$, where $f(x)$ and $g(x)$ are fixed relatively prime polynomials in $\mathbb{Z}[x]$. Or then again, maybe the speaker will discuss both topics. (Received September 15, 2013)