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Mathias Lederer* (mlederer@math.uni-bielefeld.de). *Components of Gröbner strata in the Hilbert scheme of points.*

We fix the lexicographic order on the polynomial ring $S = k[x_1, \dots, x_n]$ over a ring k . We define the moduli space of ideals in S admitting a reduced Gröbner bases with a given finite standard set $\delta \subset \mathbb{N}^n$ such that the corresponding subscheme of \mathbb{A}_k^n is étale over $\text{Spec } k$. We determine the number of irreducible and connected components of that scheme in terms of a combinatorial invariant of δ , thus proving a conjecture by Bernd Sturmfels. (Received August 10, 2010)