1077-14-2524 **Robert Edward Campbell*** (rcampbel@math.uci.edu). *Realizing Cubic Hypersurfaces in* $\mathbb{P}^3$.
There has been much work on classification of cubic surfaces in $\mathbb{P}^3$ over finite fields. The problem has been reduced to considering automorphisms of a certain combinatorial structure that arises from lines on this surface. However, it is still unknown whether each automorphism of the structure (there are known to be 25 types of these) can be realized geometrically by an actual cubic hypersurface. We present an approach allowing to construct some examples, based on the classification of automorphisms of complex cubic surfaces by I Dolgachev. (Received September 22, 2011)