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We analyze the partially ordered set of prime ideals of the projective line over the integers, denoted by $\text{Proj}(\mathbb{Z}[h, k])$, that is, the prime ideals of $\mathbb{Z}[h, k]$ generated by homogeneous polynomials in the variables h and k over \mathbb{Z} excluding the prime ideals of form (h, k, p) , with p a prime integer. In 2002, Meral Arnavut described a property that would complete the characterization of $\text{Proj}(\mathbb{Z}[h, k])$, if it always holds. In this talk we show her property holds in certain cases, and we give some preliminary results towards a characterization of $\text{Proj}(\mathbb{Z}[h, k])$ considered as $\text{Spec}(\mathbb{Z}[x]) \cup \text{Spec}(\mathbb{Z}[\frac{1}{x}])$, where the intersection $\text{Spec}(\mathbb{Z}[x]) \cap \text{Spec}(\mathbb{Z}[\frac{1}{x}])$ is identified with $\text{Spec}(\mathbb{Z}[x, \frac{1}{x}])$. (Received February 15, 2010)