1092-13-23 **William Hoffman** and **Haohao Wang*** (hwang@semo.edu), Math Department, MS6700, Cape Girardeau, MO 63701. *Minimal generators for the Rees algebra associated to the quadratically parametrized surface.*

Let f_0, f_1, f_2, f_3 be linearly independent homogeneous quadratic forms in the standard $\mathbf{Z}$-graded ring $R := \mathbf{K}[s, t, u]$, and $\gcd(f_0, f_1, f_2, f_3) = 1$. This defines a rational map $\phi : \mathbf{P}^2 \to \mathbf{P}^3$. The Rees algebra $\text{Rees}(I) = R \oplus I \oplus I^2 \oplus \cdots$ of the ideal $I = \langle f_0, f_1, f_2, f_3 \rangle$ is the graded R-algebra which can be described as the image of an R-algebra homomorphism h: $R[x, y, z, w] \to \text{Rees}(I)$. This presentation discusses the free resolutions of I, and the structure of the $\ker(h)$. (Received June 25, 2013)