1064-13-240 **Takayuki Hibi**, **Akihiro Higashitani**, **Kyouko Kimura** and **Augustine B. O'Keefe*** (aokeefe@tulane.edu). *Depth of Edge Rings Arising from Finite Graphs.*

If G is a finite graph with edge ring $K[G]$, we will show that given integers f and d with $7 \leq f \leq d$, there exists a finite graph G on $[d] = \{1, \ldots, d\}$ such that the depth of $K[G]$ is equal to f and the Krull dimension of $K[G]$ is d. We will sketch a proof using Gröbner bases, simplicial complexes and initial ideals. (Received September 10, 2010)