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**Kevin P Costello\*** (kcostell@math.rutgers.edu) and **Van H Vu**  
(vanvu@math.rutgers.edu). *The Nullspace of Random Graphs.*

We consider the Erdős-Rényi random graph  $G(n, p)$ , along with its adjacency matrix  $Q(n, p)$ , in the range  $p = \frac{c \ln n}{n}$ . In particular, we will address the following two questions (whose answer depends on  $c$ ):

1. Is  $Q(n, p)$  almost surely nonsingular?
2. If this is not the case, how can we (almost surely) characterize the nullspace of  $Q$  in terms of the structure of  $G$ ? (Received August 07, 2007)