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Arindam Banerjee and **Luis Nunez-Betancourt*** (lcn8m@virginia.edu). *Graph Connectivity and Binomial Edge Ideals*. Preliminary report.

We study the quotient of a polynomial ring R by a binomial edge ideal \mathcal{J}_G associated to a simple graph G . Specifically, we give a relation between the depth of R/\mathcal{J}_G and the vertex-connectivity of G . We also compute the graph toughness of G , when R/\mathcal{J}_G is a Cohen-Macaulay ring. (Received August 20, 2015)