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Baogang Xu, School of Mathematical Science, Nanjing, Jiangsu 210023, Peoples Rep of China,
and **Xingxing Yu*** (yu@math.gatech.edu), School of Mathematics, Georgia Institute of
Technology, Atlanta, GA 30332. *On judicious bisections of graphs.*

A *bisection* of a graph G is a bipartition S_1, S_2 of $V(G)$ such that $-1 \leq |S_1| - |S_2| \leq 1$. Bollobás and Scott conjectured that if G is a graph with m edges and minimum degree at least 2 then G admits a bisection S_1, S_2 such that $\max\{e(S_1), e(S_2)\} \leq m/3$. We confirm this conjecture and show that the triangle is the only extremal graph. Moreover, the bound $m/3$ cannot be improved to $(1/3 - \epsilon)m$, for any $\epsilon > 0$, by excluding K_3 or by increasing the minimum degree from 2 to 3. This is joint work with Baogang Xu (Received January 18, 2016)