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Joe Buhler and **Steve Butler*** (butler@math.ucla.edu), Dept of Mathematics, UCLA, Los Angeles, CA 90095-1555, and **Ron Graham** and **Eric Tressler**. *Hypercube orientations with only two in-degrees.*

We show that it is possible to orient the edges of the n -cube so that only the in-degrees a and b occur if and only if there are non-negative integers s and t so that $s + t = 2^n$ and $as + bt = n2^{n-1}$. This is connected to a question arising from constructing strategies for a type of hat game. (Received September 21, 2010)