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Ernie Croot* (ecroot@math.gatech.edu), Georgia Tech, School of Math, Atlanta, GA 30332,
and **Albert Bush, Chris Pryby** and **Gagik Amirhanyan**. *On a conjecture of Solymosi.*

We prove a theorem about lines in general position that are rich in an $n \times n$ grid $A \times A$. We show that for every $\epsilon > 0$ there exists $\delta > 0$ so that if one has n^ϵ lines in general position, they cannot all be $n^{1-\delta}$ -rich in the grid $A \times A$. We will discuss the relationship between this problem and sum-product estimates, as well as results in incidence geometry, such as the Szemerédi-Trotter Theorem. (Received August 23, 2012)