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Ameera Naz Chowdhury* (anchowdh@math.ucsd.edu), 9500 Gilman Drive # 0112, San Diego, CA 92093-0112. *On a Conjecture of Frankl and Füredi*. Preliminary report.

Frankl and Füredi conjectured that if $\mathcal{F} \subset 2^X$ is a non-trivial λ -intersecting family of size m , then the number of pairs $\{x, y\} \in \binom{X}{2}$ that are contained in some $F \in \mathcal{F}$ is at least $\binom{m}{2}$ [P. Frankl and Z. Füredi. A Sharpening of Fisher's Inequality. *Discrete Math.*, 90(1):103-107, 1991]. We verify this conjecture in some special cases, focusing especially on the case where \mathcal{F} is additionally required to be k -uniform and λ is small. (Received August 08, 2010)