1145-VS-113   **Juan G Orozco*** (`jgorozco@gmail.com`), 4101 Aplomado Falcon Cove, Austin, TX 78738.
Algorithmic approach to Goldbach and Twin Primes Conjectures.

We present a greedy elimination algorithm that generates lower bounds on Twin Prime and Goldbach pair counts.

By incorporating Mertens' third theorem and the twin prime constant, we generate a lower-bound closed formula on pair counts for both conjectures. The algorithm can also be applied to Germain primes, Cousin Primes, and other prime related conjectures that result in an Euler product like $\prod \left(1 - \frac{a}{p}\right)$. (Received August 02, 2018)