1138-60-157 **Ben Jaye*** (bjaye@clemson.edu), Clemson University, Clemson, SC 29631. *On the probability that a stationary Gaussian process with spectral gap remains non-negative on a long interval.*

Let $f$ be a continuous stationary Gaussian process on $\mathbb{R}$ whose spectral measure vanishes in a $\delta$-neighborhood of the origin. We shall prove that the probability that $f$ stays non-negative on an interval of length $L$ is at most $e^{-c\delta^2 L^2}$ with some absolute $c > 0$ and that the result is sharp without additional assumptions. Joint work with Naomi Feldheim, Ohad Feldheim, Fedor Nazarov, and Shahaf Nitzan. (Received February 08, 2018)