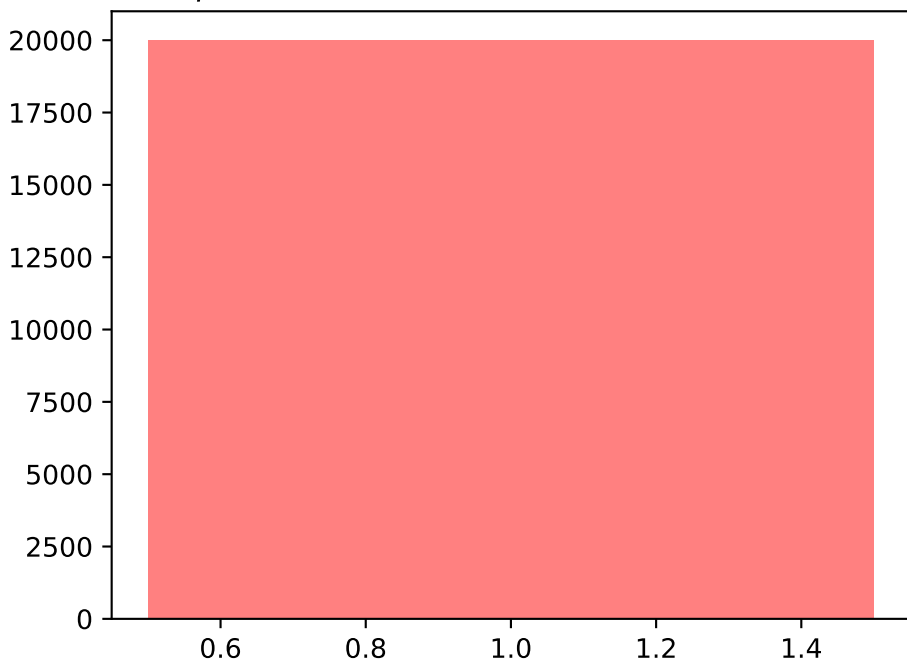Product space simulation

Re : $\mu = 1.000000$, $\sigma = 0.000000$, $\varepsilon = 0.000000$

Im : $\mu = 0.000000$, $\sigma = 0.000000$, $\varepsilon = 0.000000$