

Q1

The following answers are for a Poisson train of 1000 seconds and 35Hz firing rate with a refractory period of 0ms and 5ms respectively. The Fano factor is then calculated for each window width being 10ms, 50ms and 100ms respectively. The Coefficient of Variation is also calculated.

Refractory period: 0ms

Window width: 10ms

Fano factor: 1.0036 Coefficient of variation: 0.9967

Window width: 50ms

Fano factor: 1.0006 Coefficient of variation: 0.9967

Window width: 100ms

Fano factor: 0.9898 Coefficient of variation: 0.9967

Refractory period: 5ms

Window width: 10ms

Fano factor: 0.7507 Coefficient of variation: 0.8282

Window width: 50ms

Fano factor: 0.6913 Coefficient of variation: 0.8282

Window width: 100ms

Fano factor: 0.6773 Coefficient of variation: 0.8282

Q2

The following answers are calculated from data from rho.dat. The Fano factor and the Coefficient of Variation is calculated for window width 10ms, 50ms, and 100ms respectively.

Window width: 10ms

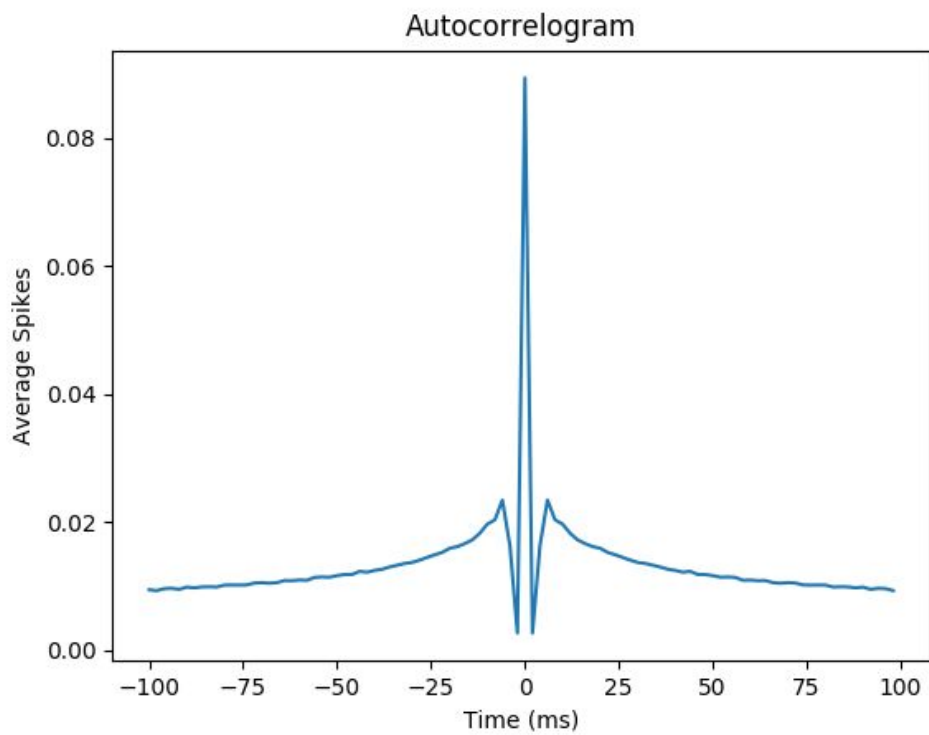
Fano factor: 1.1176 Coefficient of variation: 2.0085

Window width: 50ms

Fano factor: 2.9297 Coefficient of variation: 2.0085

Window width: 100ms

Fano factor: 4.1029 Coefficient of variation: 2.0085

Q3Q4