



S1 Figure. Typical *in silico* simulated fluorescence recovery curve of a FRAP experiment (*i.e.* with the disk-shaped bleaching geometry). The simulated fluorescence intensity values (black diamonds) were generated by adding Gaussian noise $G(i)$ to the theoretical values $I(i)$ (red dots) deduced from Equation (1). $G(i)$ is a random number with the Gaussian probability distribution centered on 0 with the standard deviation $k \sqrt{I(i)}$ (zone delimited by the two dashed curves). In this example, $\tau = 3$ frame periods and $k = 0.05$.