

we move each of the particles in succession according to the following prescription:

$$\begin{aligned} X &\rightarrow X + \alpha \xi_1 \\ Y &\rightarrow Y + \alpha \xi_2, \end{aligned} \tag{3}$$

where α is the maximum allowed displacement, which for the sake of this argument is arbitrary, and ξ_1 and ξ_2 are random numbers§ between (-1) and 1 . Then, after