The specific process we are simulating is as follows:

$$\begin{aligned} y &= X\beta + \epsilon \\ \epsilon &= \lambda W \epsilon + \nu \end{aligned} \tag{1}$$

where $\nu \sim N(0, \sigma^2 I)$, λ is a spatial autocorrelation parameter (scalar) and W is a spatial weights matrix. We will shortly explain these new entities, but for now we simply note that they allow us to simulate a process whereby the ϵ's, and therefore the y's are spatially autocorrelated. If $\lambda = 0$ then the $i.i.d.$ assumption holds, otherwise there is spatial dependence.