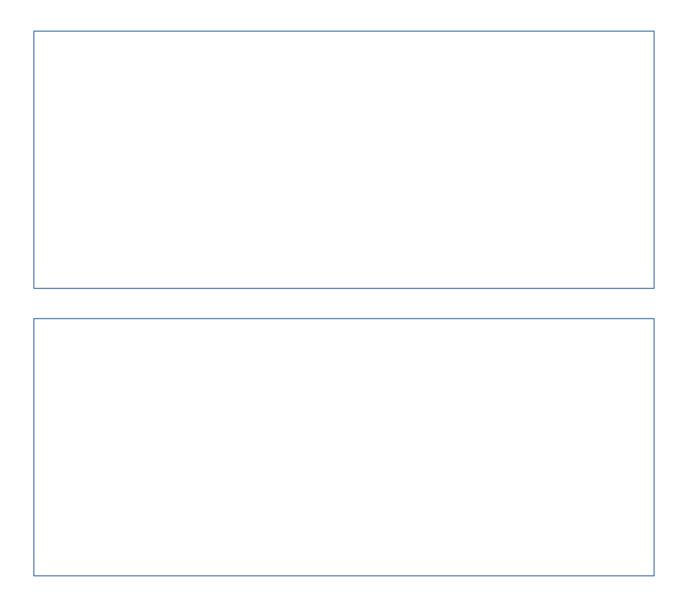
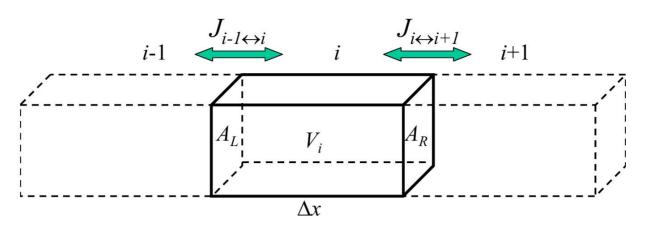
Respecto del problema de la difusión





$$V_i = \Delta x \Delta y \Delta z, A_L = A_R = \Delta y \Delta z$$

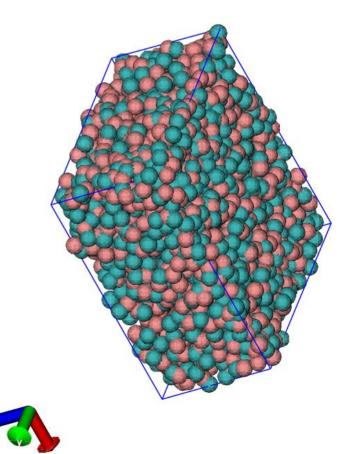
$$\begin{split} \frac{C_i^{t+\Delta t} - C_i^t}{\Delta t} V_i &= J_{i-1 \to i} A_L - J_{i \to i+1} A_R \\ J_{i-1 \to i} &= -D \frac{C_i^t - C_{i-1}^t}{\Delta x} \\ J_{i \to i+1} &= -D \frac{C_{i+1}^t - C_i^t}{\Delta x} \\ \frac{C_i^{t+\Delta t} - C_i^t}{\Delta t} V_i &= -D \frac{C_i^t - C_{i-1}^t}{\Delta x} A_L - (-D) \frac{C_{i+1}^t - C_i^t}{\Delta x} A_R \end{split}$$

$$\frac{C_{i}^{t+\Delta t} - C_{i}^{t}}{\Delta t} = D \frac{C_{i+1}^{t} - 2C_{i}^{t} + C_{i-1}^{t}}{\Delta x^{2}}$$

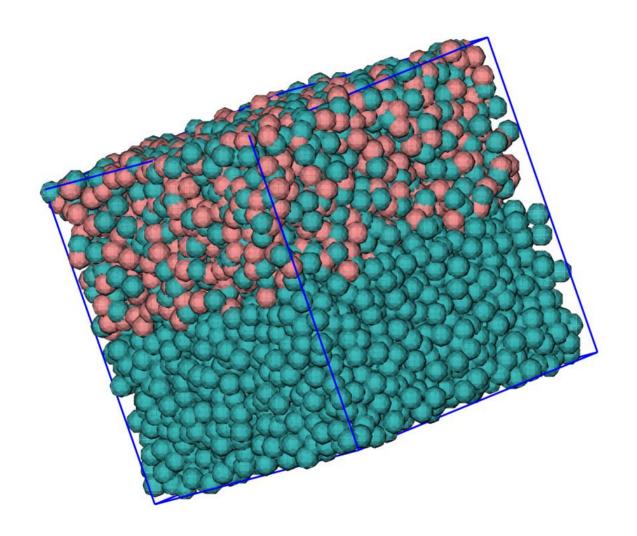
Construimos 2 slabs a la densidad y temperatura deseada con Mitad del total de particulas c/u

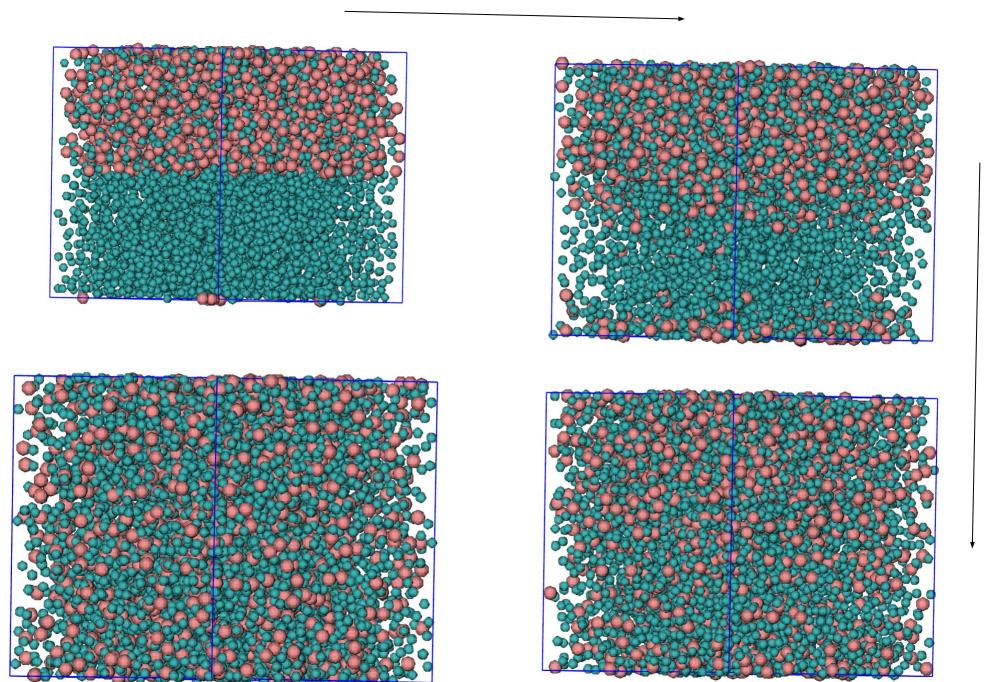
Un slab es puro neutron

El otro con mezcla o sea

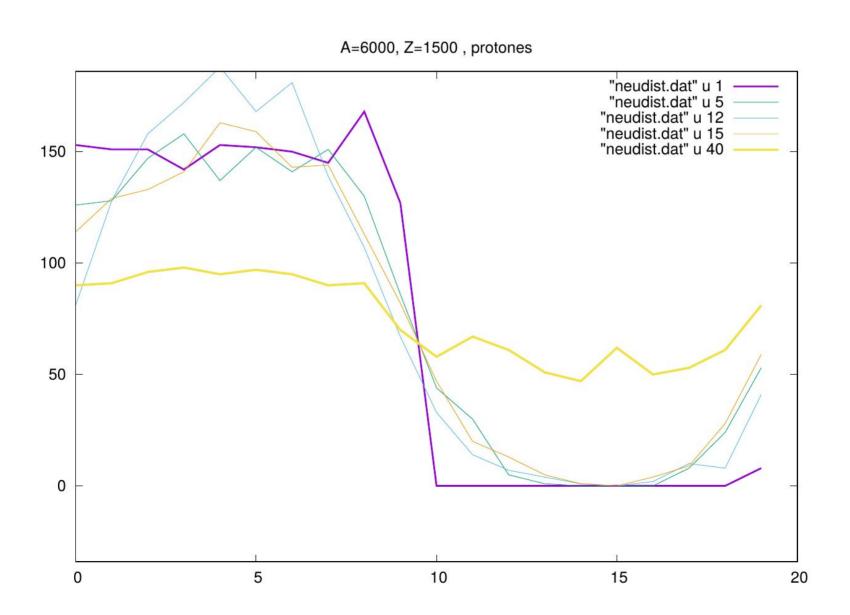


Construimos el sistema de interes

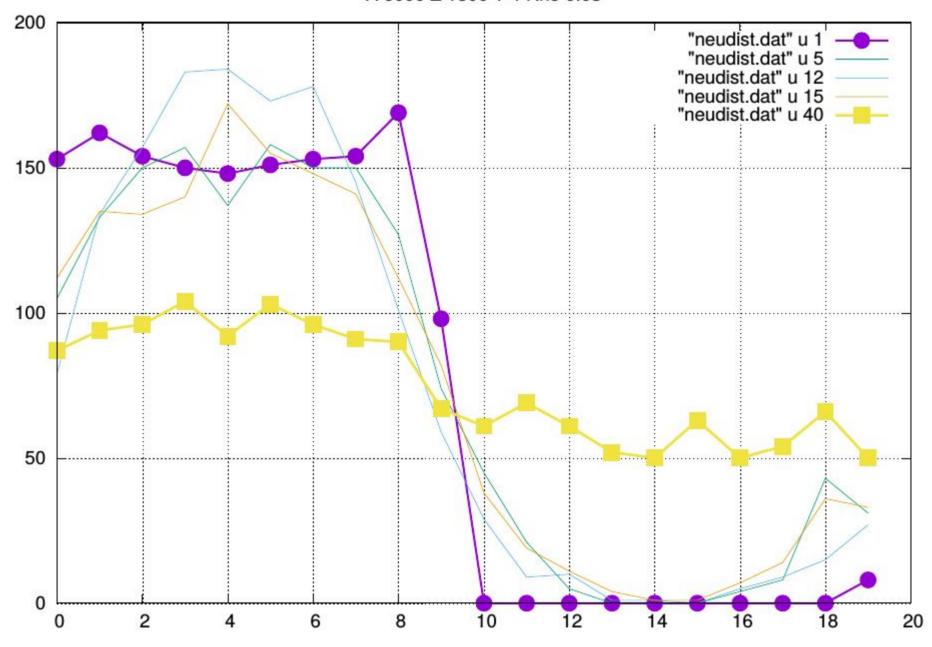




Dividimos al sistema en 20 slices y vemos la evolucion temporal



A 6000 Z 1500 T 4 Rho 0.08



A 6000 Z 1500 T 4 neu

