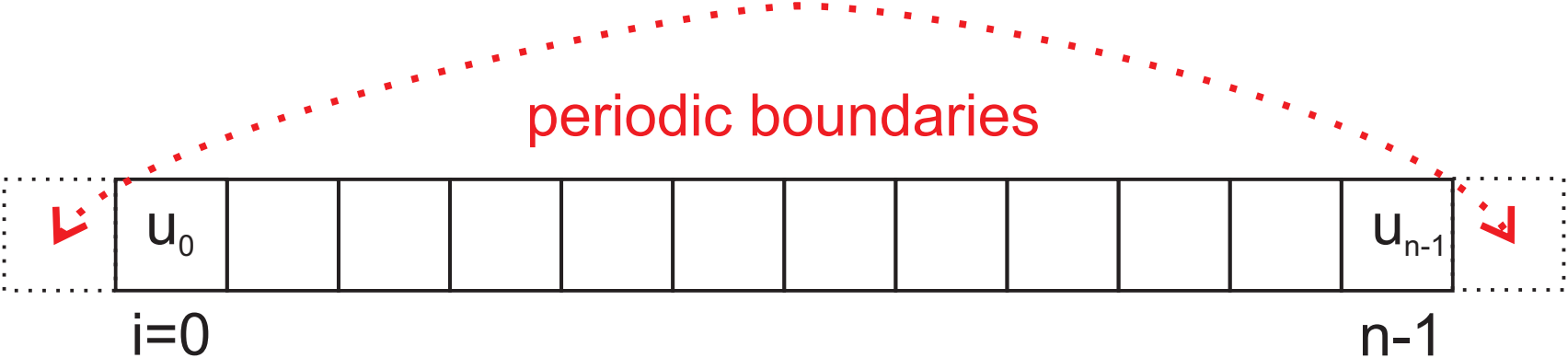

periodic boundaries
u_0
u_{n-1}
i=0
n-1