$$C_{out,i+1} = C_{out,i} + rac{C_{out,i} - C_{3,i}}{(1 - lpha_1)(1 - lpha_2)\, au}\;\Delta t$$

$$\nu C_{out} = \nu C_3 + (1 - \alpha_1)(1 - \alpha_2) V \frac{dC_{out}}{dt} \Longrightarrow$$

$$\Longrightarrow C_{out} = C_3 + (1 - \alpha_1)(1 - \alpha_2) \tau \frac{dC_{out}}{dt} \Longrightarrow$$

$$\Rightarrow C_{out} = C_3 + (1 - \alpha_1)(1 - \alpha_2) \tau \frac{\text{d}C_{out}}{\text{d}t} \Rightarrow$$

$$dC_{out} \qquad C_{out} - C_3$$

$$\implies \frac{\mathrm{d}C_{out}}{\mathrm{d}t} = \frac{C_{out} - C_3}{(1 - \alpha_1)(1 - \alpha_2)\tau} \implies$$

 $\implies C_{out,i+1} = C_{out,i} + \frac{C_{out,i} - C_{3,i}}{(1 - \alpha_1)(1 - \alpha_2)\tau} \Delta t$ 

$$\Rightarrow \frac{dC_{out}}{dt} = \frac{C_{out} - C_3}{(1 - \alpha_1)(1 - \alpha_2)\tau} \Rightarrow$$

$$\Rightarrow \frac{\Delta C_{out}}{\Delta t} = \frac{C_{out,i+1} - C_{out,i}}{\Delta t} = \frac{C_{out,i} - C_{3,i}}{(1 - \alpha_2)(1 - \alpha_3)\tau} = \frac{C_{out,i} - C_{3,i}}{(1 - \alpha_3)(1 - \alpha_3)\tau} = \frac{C_{0ut,i} - C_{3,i}}{(1 - \alpha_3)(1 - \alpha_3$$

$$\Rightarrow \frac{dC_{out}}{dt} = \frac{C_{out} - C_3}{(1 - \alpha_1)(1 - \alpha_2)\tau} \Rightarrow$$

$$\Rightarrow \frac{\Delta C_{out}}{\Delta t} = \frac{C_{out,i+1} - C_{out,i}}{\Delta t} = \frac{C_{out,i} - C_{3,i}}{(1 - \alpha_1)(1 - \alpha_2)\tau} \Rightarrow$$