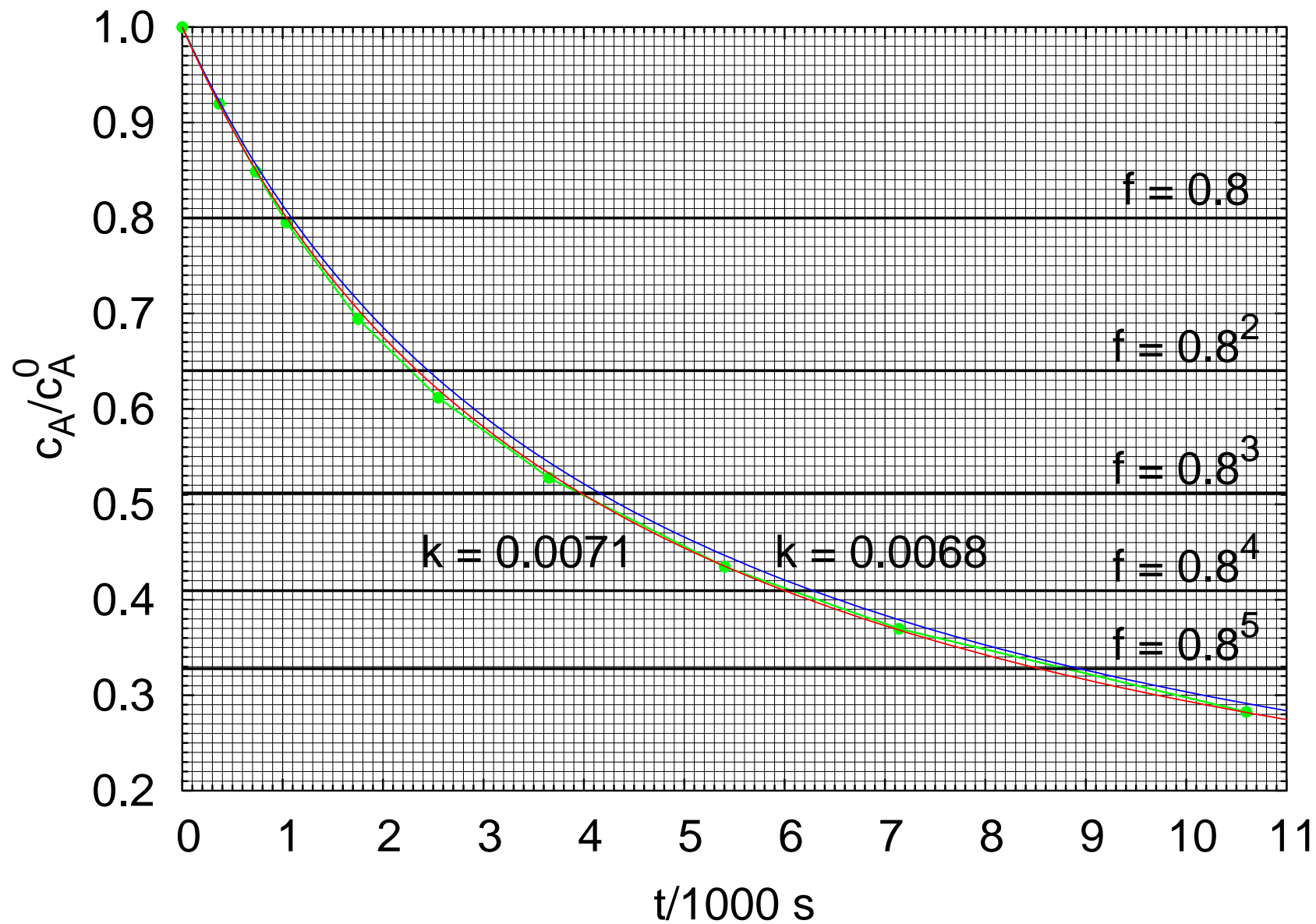
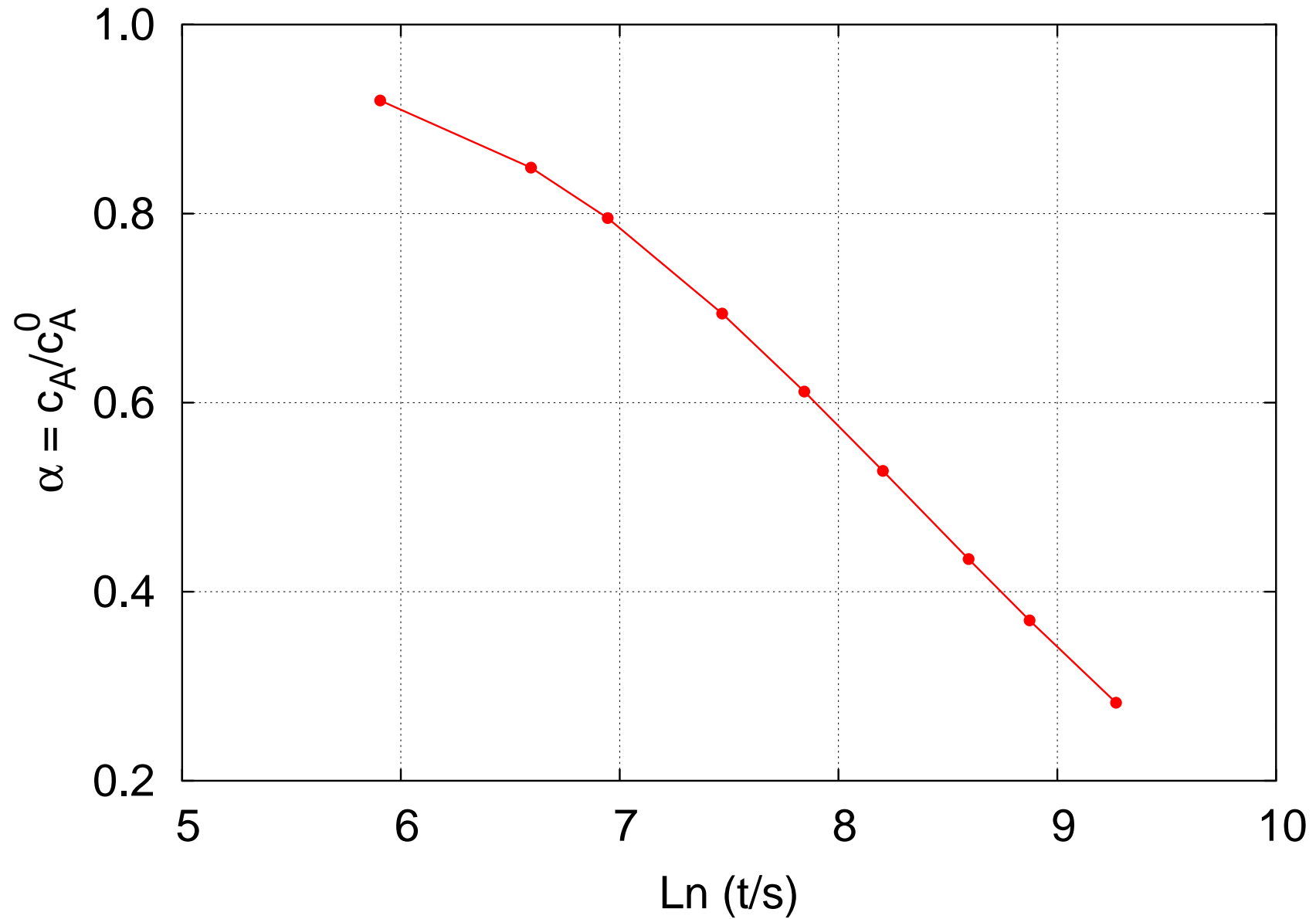


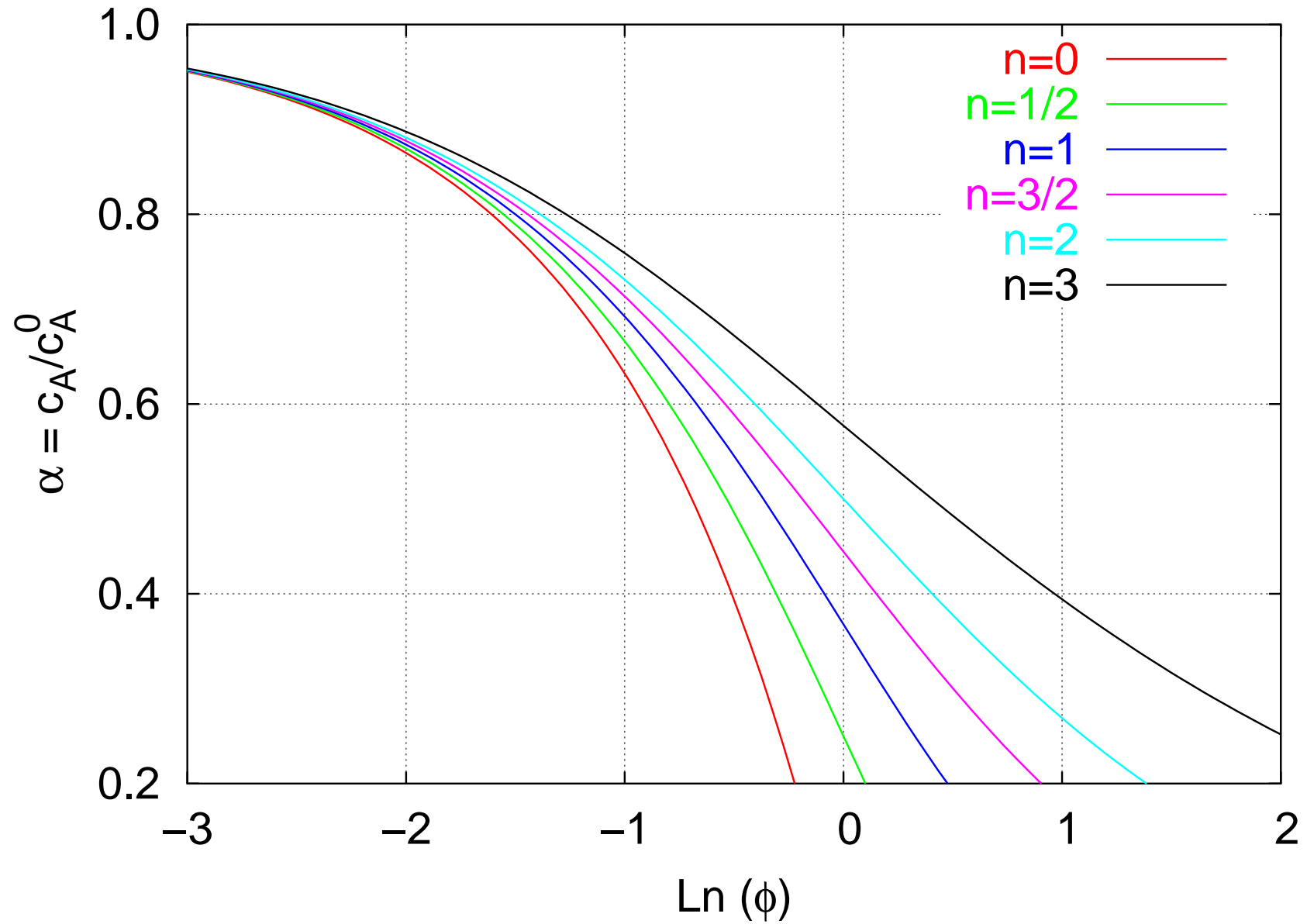
Butadieno: tiempos fraccionarios, ecuación integrada, datos



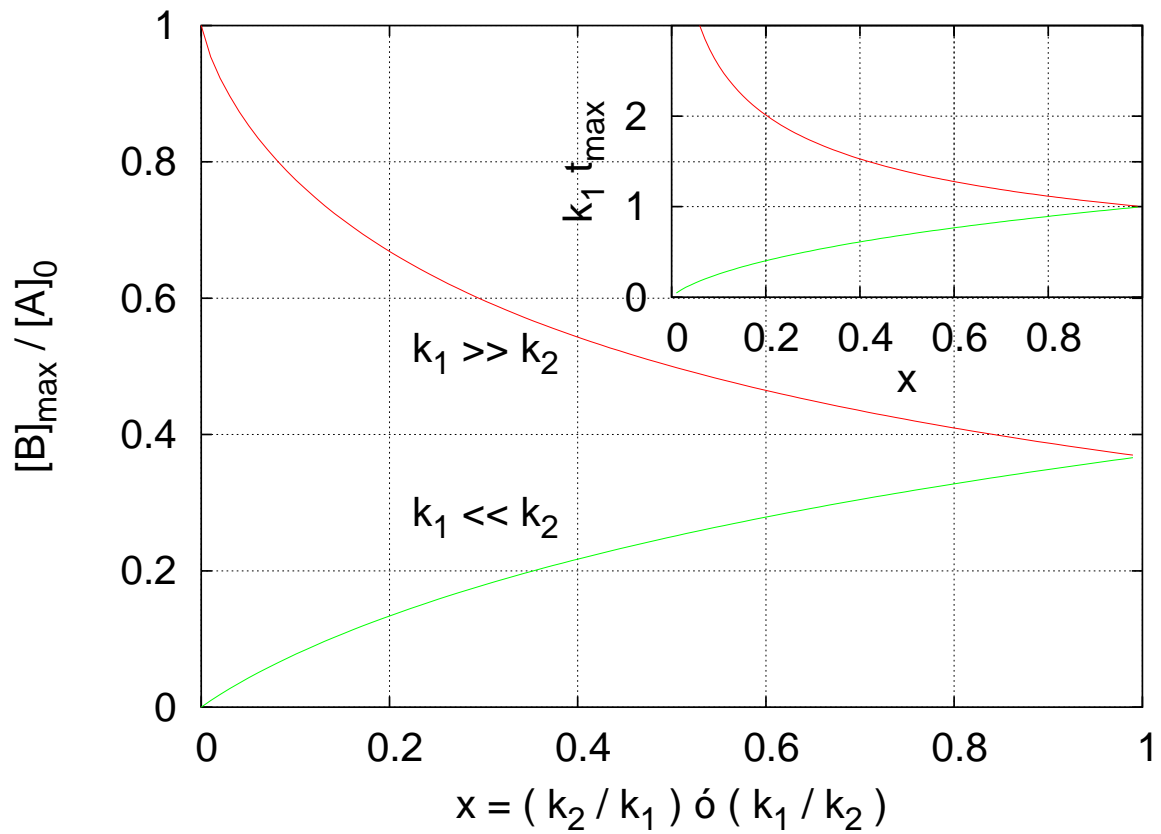
## Butadieno: representación de Powell



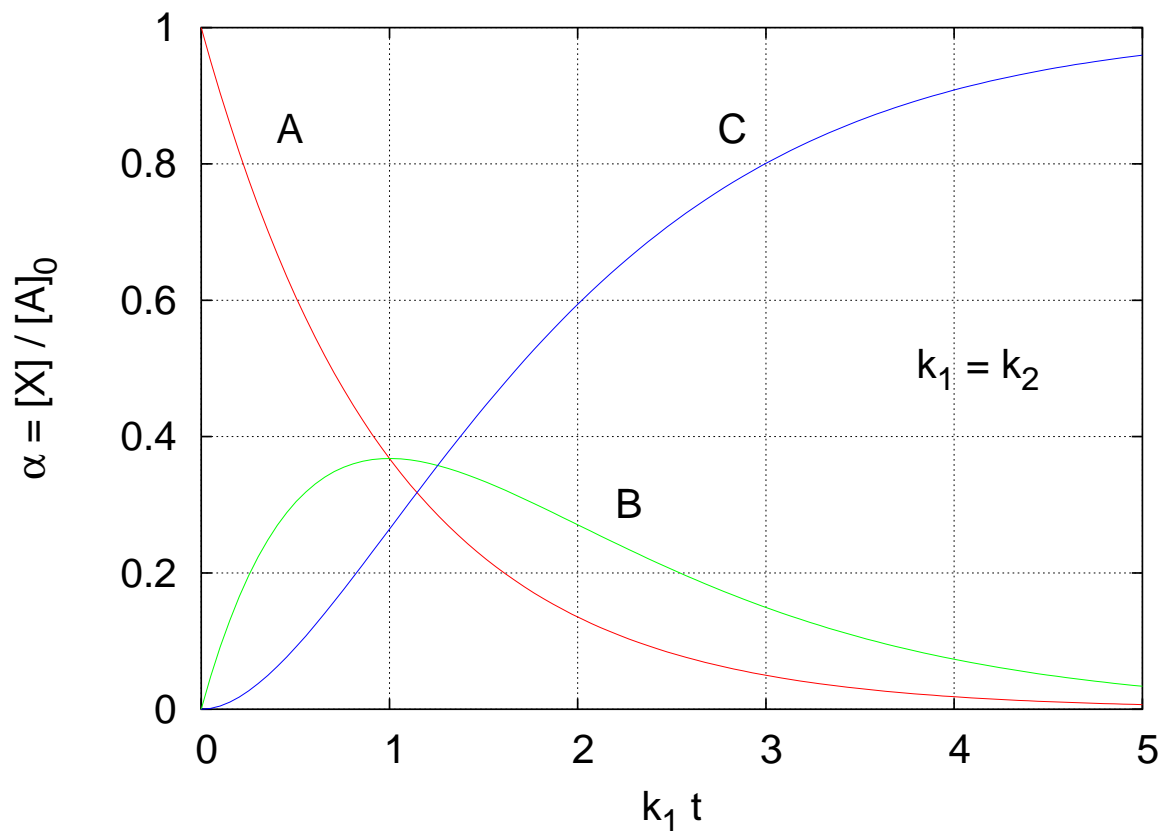
# Curvas de referencia del método de Powell



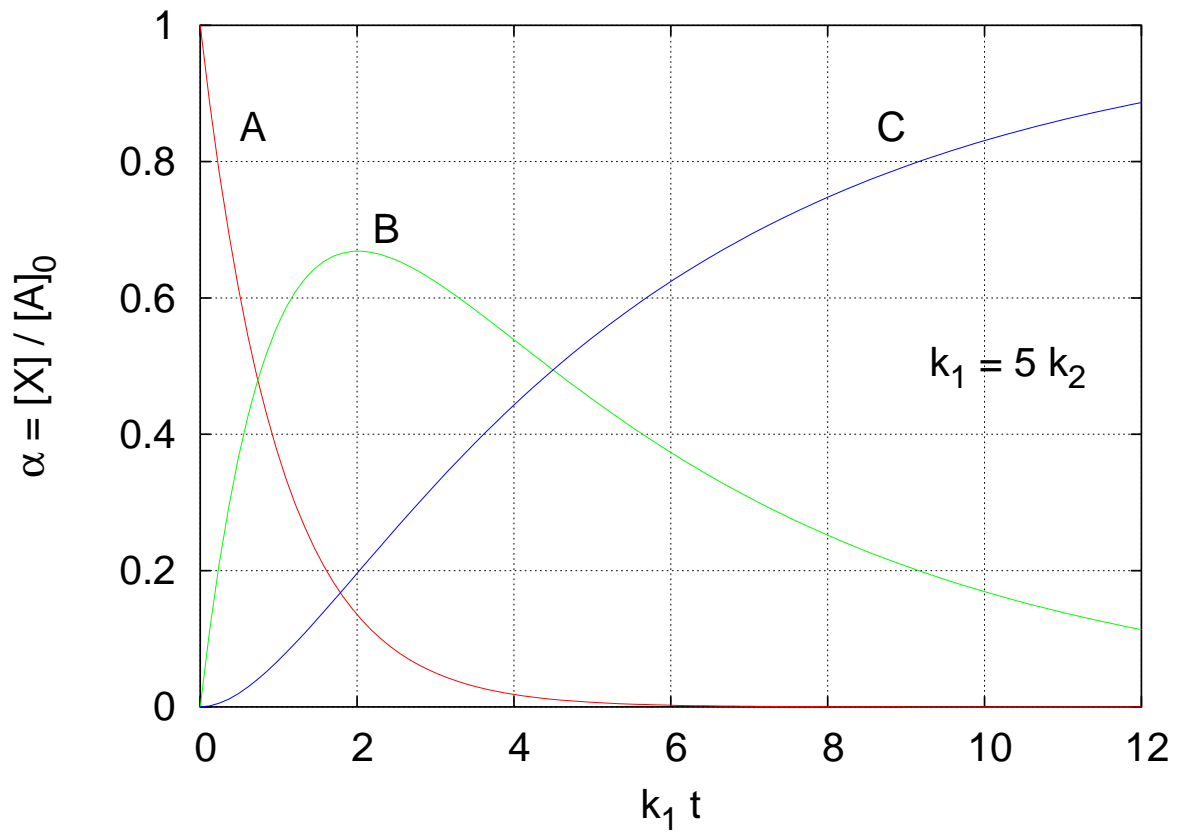
Máximo de  $[B]/[A]_0$ ,  $x = k_2/k_1 < 1$ ,  $x = k_1/k_2 < 1$



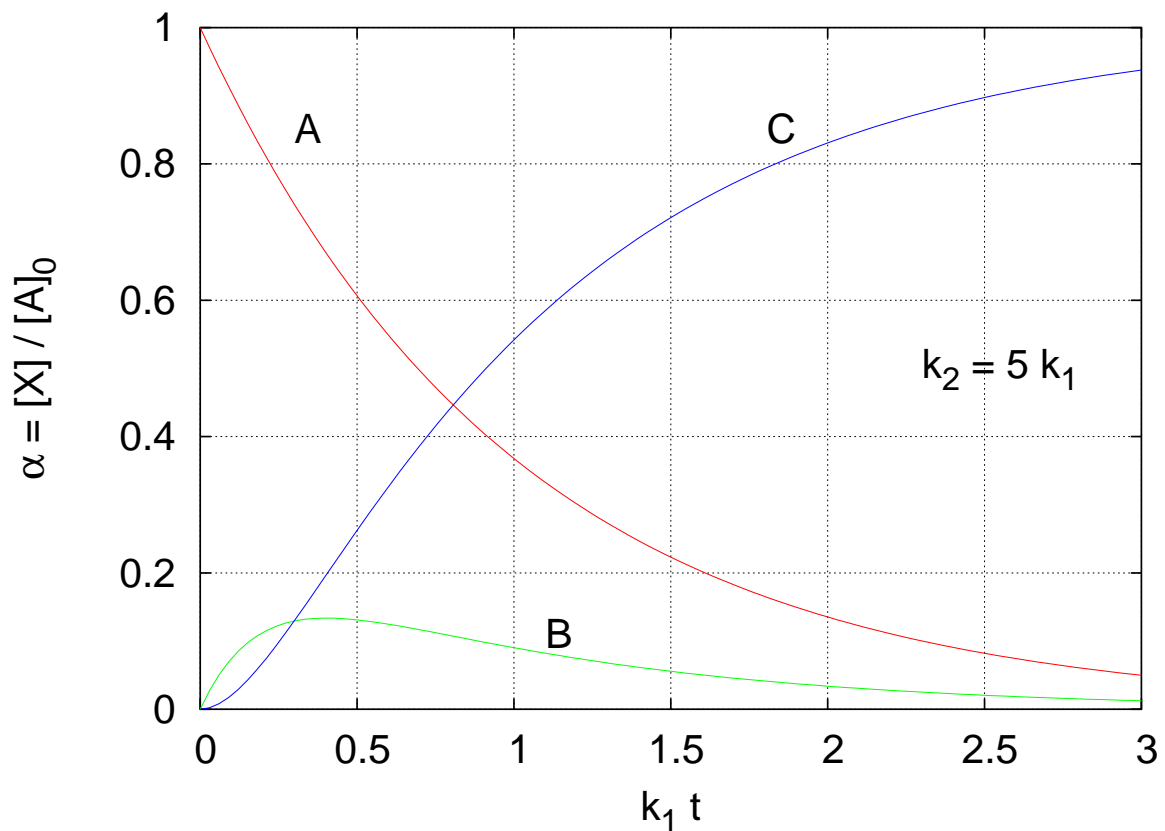
Ecuación integrada,  $[B]_0 = [C]_0 = 0$ ,  $k_1 = k_2 = k$



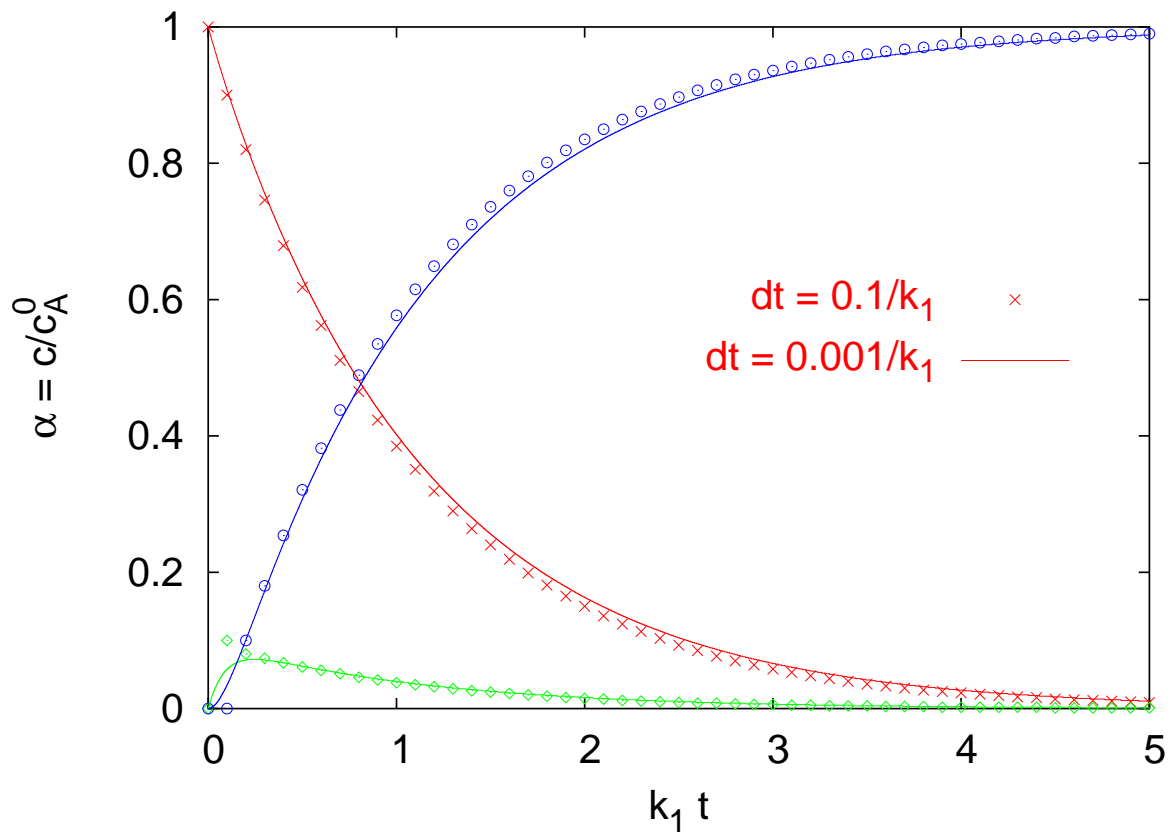
Ecuación integrada,  $[B]_0 = [C]_0 = 0$ ,  $k_1 = 5k_2$



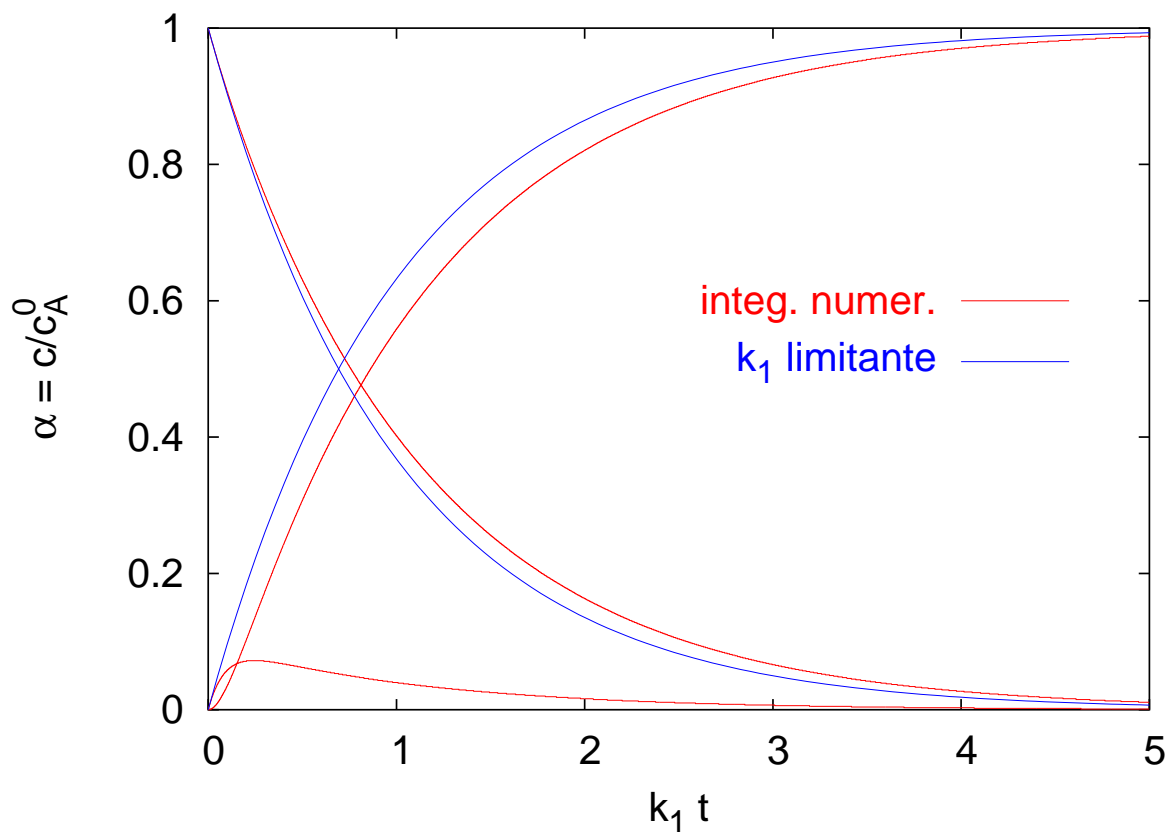
Ecuación integrada,  $[B]_0 = [C]_0 = 0$ ,  $k_1 = k_2/5$



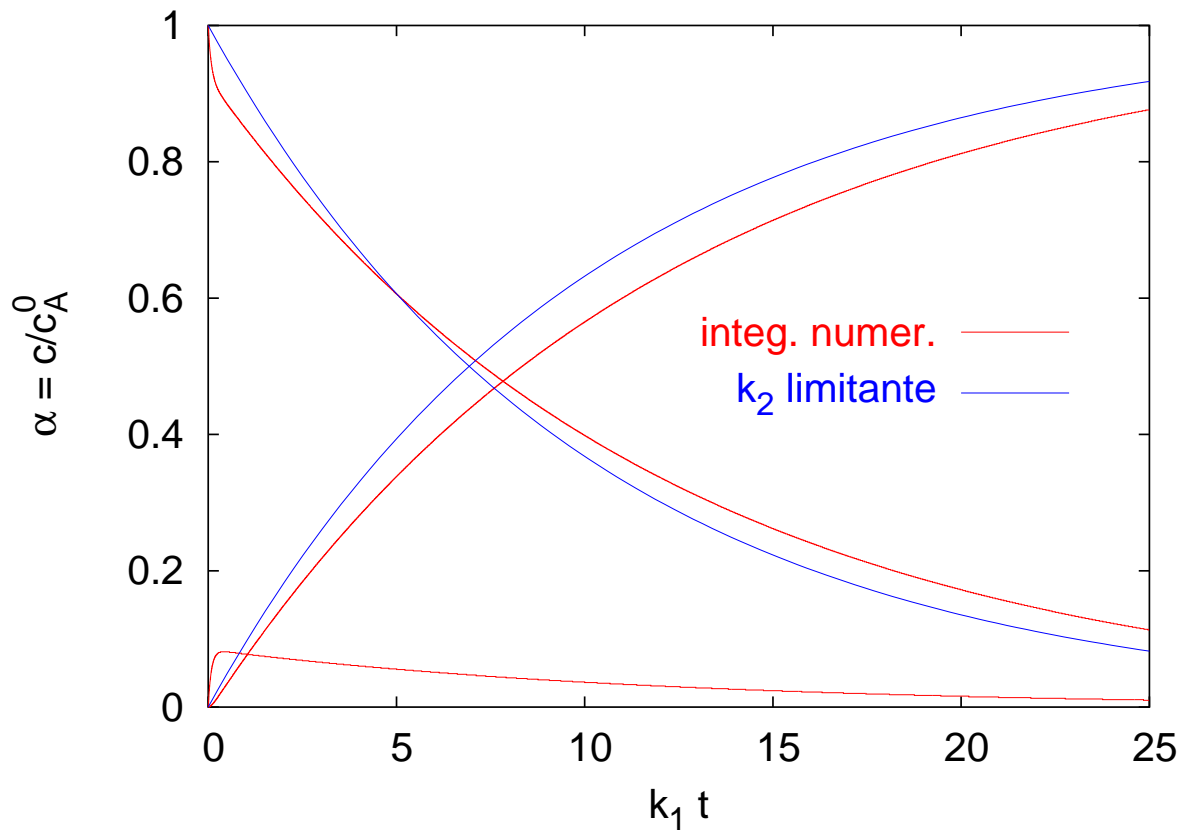
# Integración numérica de $A \xrightleftharpoons[k_{-1}]{k_1} X \xrightarrow{k_2} Z$



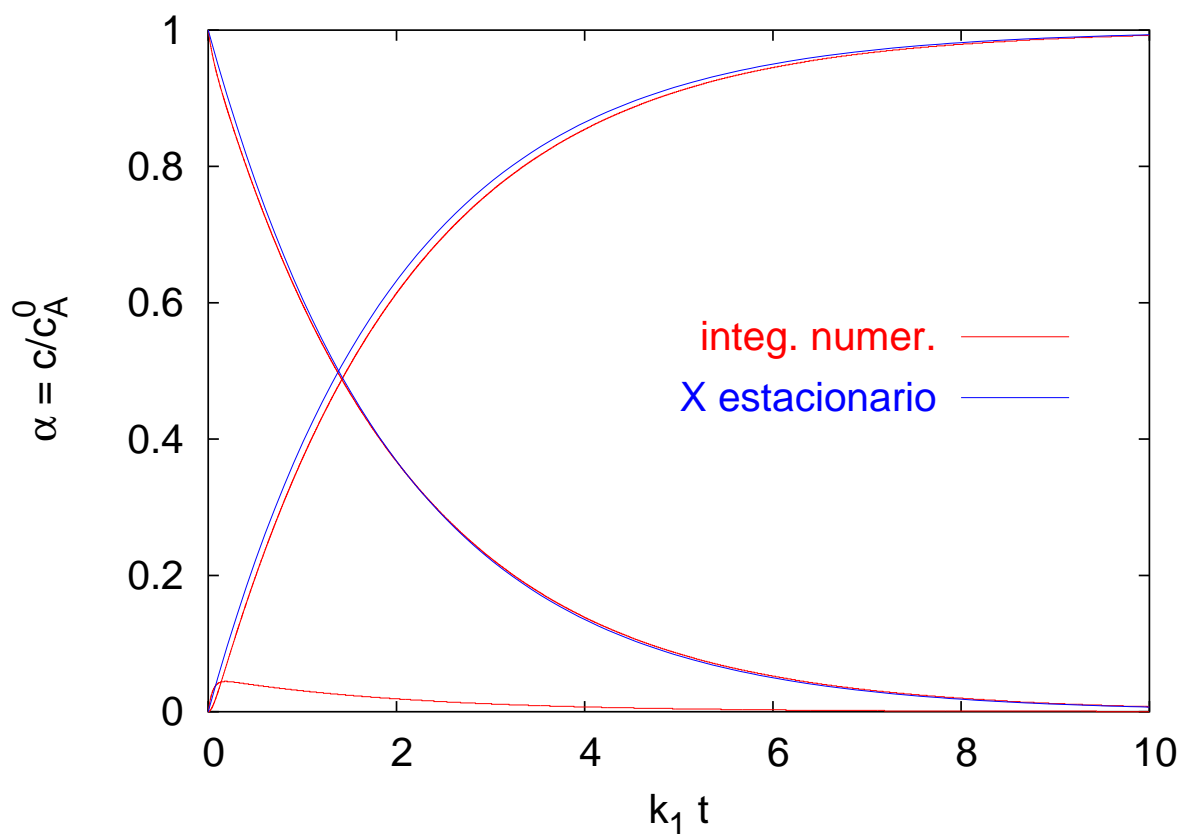
Etapa limitante  $k_1$ :  $k_{-1} = k_1 \ll k_2 = 10k_1$



Etapa limitante  $k_2$ :  $k_{-1} = 10k_1 \gg k_2 = k_1$



Estado estacionario (sin e. lim.):  $k_{-1} = 10k_1 = k_2$



Representación de Arrhenius para  $\text{H}_2 + \text{I}_2 \rightarrow 2 \text{HI}$

