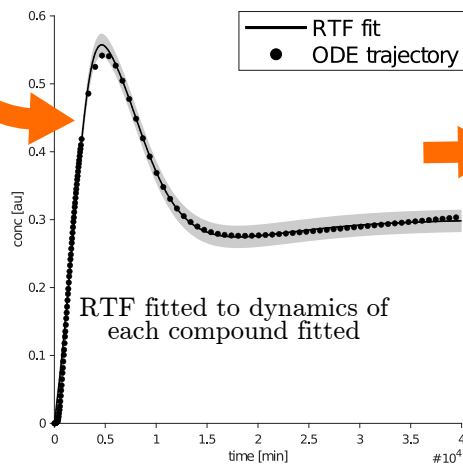


ODE model

$$\begin{aligned}\dot{x}_1(t) &= d_1(x_1(t), \dots, x_n(t), u, \theta_d) \\ \dot{x}_2(t) &= d_2(x_1(t), \dots, x_n(t), u, \theta_d) \\ &\dots \\ \dot{x}_n(t) &= d_n(x_1(t), \dots, x_n(t), u, \theta_d)\end{aligned}$$

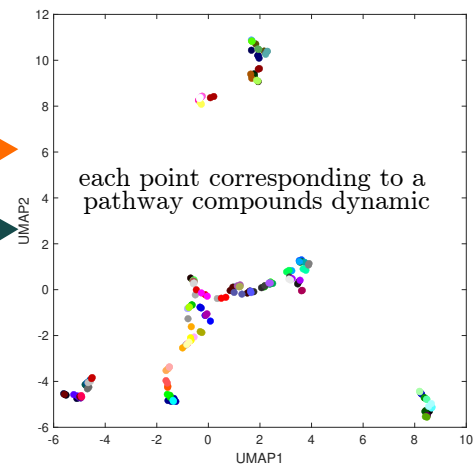
RTF fitted on ODE solutions



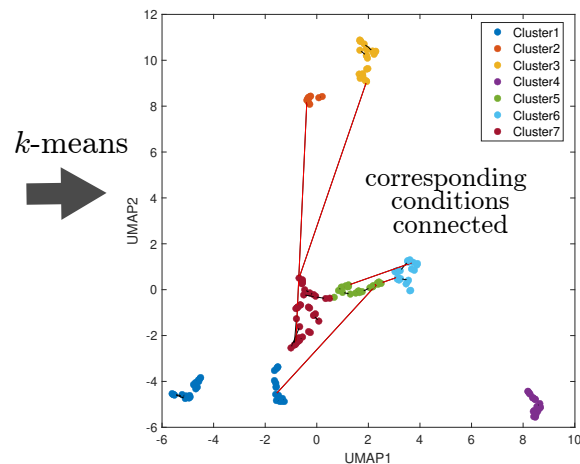
Estimated RTF parameters

A
 B
 α
 β
 γ
 τ
 b

UMAP



clustered UMAP



same procedure for all pathway compounds