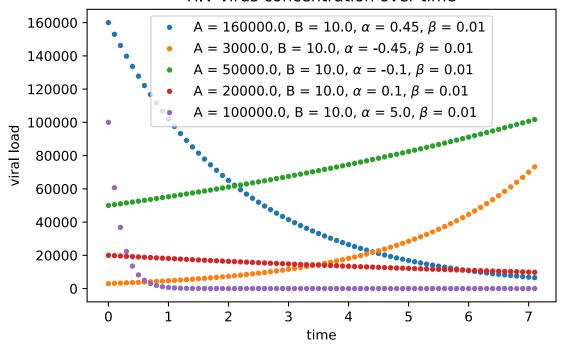
## HIV virus concentration over time



Changing A changes the initial viral load, or the viral load at t=0. Referring to the figure, we see the blue scatter points begin at 160000, the purple at 100000, the orange at 3000, etc. A negative value for A would give a negative viral load at t=0.

Alpha controls the rate at which the exponential decays or grows. Referring to the figure, we see negative alpha values, corresponding to the orange and green points, cause exponential growth, whereas the positive values for alpha give exponential decay, shown in the blue, red and purple points. If we isolate the blue points and the purple points, we see increasing the alpha value increases the rate at which the exponential decays.