

Christie 1st decay model: $\frac{dc}{dt} = -kC$ ← elapsed time

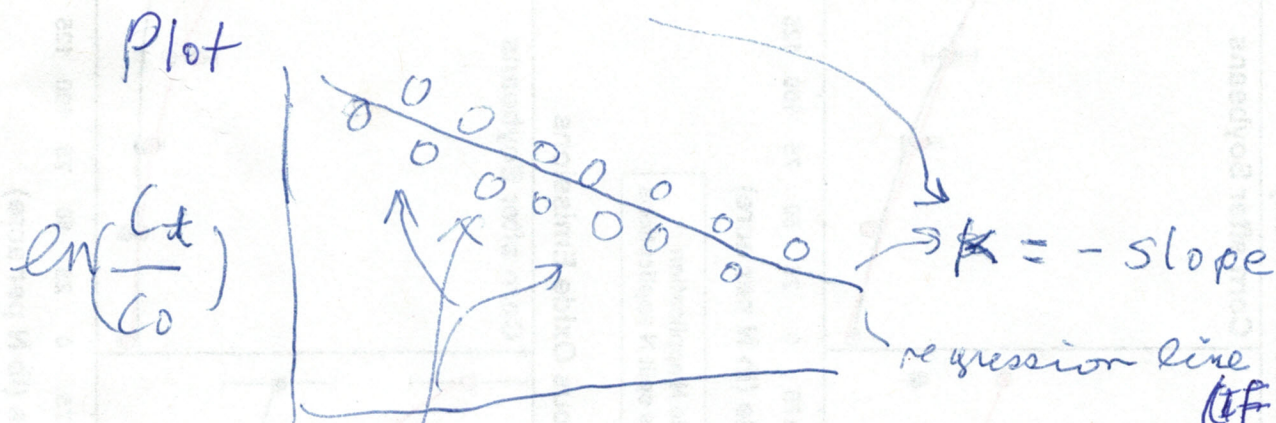
solution $\Rightarrow C(t) = C_0 \exp(-kt)$

↑ C_0 initial value (theoretical)

measured value at time t

~~So~~ $\Rightarrow \frac{C(t)}{C_0} = \exp(-kt)$

$\Rightarrow \ln\left(\frac{C(t)}{C_0}\right) = -kt$



* (sampling time)

↓
total time elapsed

Combined data
from all
concentrations
and all

Sampling
dates

if we're
lucky
 r^2 will
be
reasonable

Once you have 'k', you have the model
use in reverse:

$C_0 = C(t) \exp(+kt)$