

Then we can do regularized version of Newton's method.

Lecture 3.4 — 3.27

We assume prior:  $x \sim e^{-\alpha^2 \|x\|^2}$  (rather than  $x$  is arbitrary) ~~we~~

this is our belief of the solution before we start

Then we can use Bayes theorem, with prior and distribution of errors. to ~~max the~~ <sup>have</sup> probability distribution of solutions, which we can find the max.

MAP