Stochastic methods

GUARANTEED TO CONVERGE...

...IN INFINITE TIME.
Stochastic methods

- Useful in time-constrained systems like L1 or HLT.
Useful in optimization of analyses with many systematic uncertainties.
Can we be as accurate as MINUIT while being faster?
Stochastic methods

- Guaranteed to converge to best answer...
  - ...in infinite time.
- Quickly get a “good enough” answer.
  - Useful in time-constrained systems (L1 or HLT?).
- Robust minimum vs. absolute best.
  - Useful in optimization of analyses with many systematic uncertainties.

- ATLAS+CMS Higgs 4000 parameter likelihood.
  - Is there something as accurate as MINUIT but faster?