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# Data Analysis 4

Day 3!

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# Goals for Today:

- Review of Day 2
- Finish minimization techniques
- Review of MCMC
- Playing with emcee

# Review of Day 2

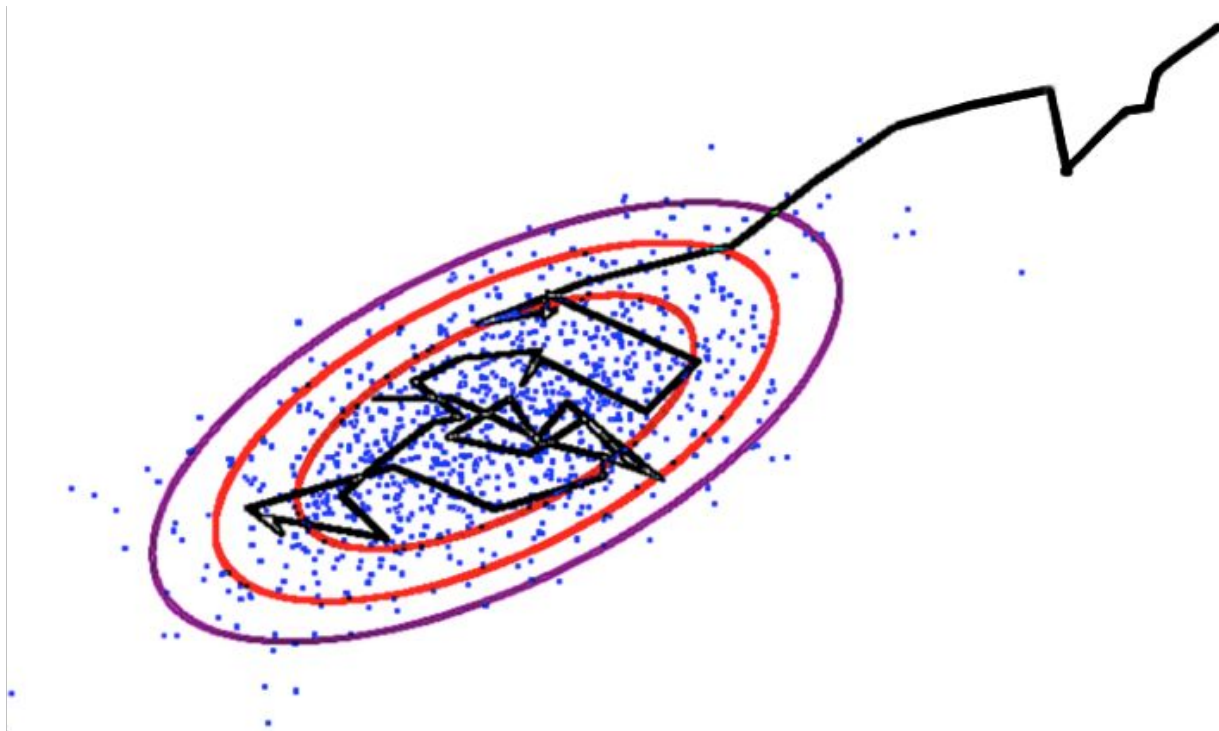
# Minimization methods

- Combining models, metrics and methods
- The basic idea behind a “gradient descent” algorithm
- Any Python questions

**Go back over Python!**

# Review of MCMC

# MCMC is a method of sampling your posterior



# So what makes MCMC unique?

- An MCMC doesn't directly try to *completely* optimize the metric. Instead an MCMC samples from a posterior, giving you the power to find optimal values and confidence intervals



# Python!