AST 384C: Computational Astrophysics

HW 4 (due by 5pm central time on Wednesday, April 23)

Complete the following questions by submitting (documented) code and any accompanying answers / plots in a github repository. Email me the repository link once you've committed your solutions. Make sure to clearly document your code; when in doubt, over-explain!

1. **non Gaussian sampler**

   Do problem 9 from Hogg & Foreman-Mackey (1710.06068)

2. **Convergence**

   Do problem 10 from Hogg & Foreman-Mackey

3. **Autocorrelation**

   Do problem 11 from Hogg & Foreman-Mackey. Repeat the exercise using a proposal distribution that has a variance two times larger, and again with a variance that is two times smaller than what is given in the original problem. How does the autocorrelation function change (and why)?