Weekly Report

Summary

- **Period:** Jan 1 to Jan 12, 2021
- **Task Finished:** Fit LCDM+curvature, LCDM+N_{eff} model with Cobaya, obtain the best fit parameters.
- **Questions Meet:**
  - How to adjust the parameters for different combination of sterile neutrino and active neutrino.
  - What the best fitting parameters mean for the Hubble tension problem?
- **Plans for next 7 days**:
  - Finish all the model fitting for CMB data.
  - Summarize current results (theory, coding and other) to a short note as a very initial draft for the paper in the future.

Progress in Details

In this part, I will write a bit more about the progress for the past days. This week I ran the *Cobaya* code for LCDM+Curvature model and LCDM+N_{eff} model by setting parameters in the .yaml files. The model files (.yaml files) and the best fitting parameters files are uploaded to Github.