

Getting Started: Large-Scale-Structure Surveys - RSD

	Name/Link	Description
S O F T W A R E	LaTeX/Overleaf	In physics, we use LaTeX to write journal articles and it is recommended to use it for shared project notes as well. It makes life easier for typing equations, and allows you to cite references and ref to figures and equations in an automated way. Ask us for a template if you want to play with it.
	TBD (Julia)	Cosmological calculations
T H E O R Y	Book by Dodelson: Modern Cosmology	Chapters 1, 2 - General Cosmology Chapter 9 - RSD
	RSD Theory	- RSD review https://wwwmpa.mpa-garching.mpg.de/~komatsu/lecturenotes/Shun_Saito_on_RSD.pdf - Hamilton review https://arxiv.org/pdf/astro-ph/9708102.pdf
	In-depth theory papers	-Wide Angle Effects https://arxiv.org/abs/1709.09730 - Angular power spectra https://arxiv.org/pdf/astro-ph/0605302.pdf , section 3. - Algorithm speed-up Beginning of sections 3 and 4 explain the essence of the algorithm: https://ui.adsabs.harvard.edu/abs/2018PhRvD..97b3504G/abstract
	Future LSS Surveys	- Spectroscopic: WFIRST, Euclid, DESI, SPHEREx - Photometric: LSST, WFIRST
	Data analysis papers	- BOSS Data Analysis Papers https://arxiv.org/pdf/1607.03150.pdf

Coding practices:

- We follow the standard **git workflow** when collaborating on the same code (see notes in the same directory).
- We try our best to adhere to the [python style guide](#) from Google.
- More guidance at: <https://github.com/chenheinrich/Students>