Some Dark Matter resources[a]

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I. EVIDENCE FOR DARK MATTER

1. Zwicky, (1937) On the Masses of Nebulae and of Clusters of Nebulae. http://adsabs.harvard.edu/abs/1937ApJ....86..217Z

2. V.C.Rubin et al (1980),Rotational properties of 21 SC galaxies with a large range of luminosities and radii: http://adsabs.harvard.edu/abs/1980ApJ...238..471R

II. COSMOLOGY

A. CMB anisotropies

1. Ma & Bertschinger (1995) Cosmological Perturbation Theory in the Synchronous and Conformal Newtonian Gauges http://arxiv.org/abs/astro-ph/9506072

2. Wayne Hu (PhD thesis): http://background.uchicago.edu/~whu/thesis/

3. The CLASS cosmological recombination code http://class-code.net[1]

B. Thermal history and freeze-out

1. Kolb & Turner (textbook): The Early Universe

2. Gondolo & Gelmini (1990): Cosmic abundances of stable particles: Improved analysis. http://inspirehep.net/record/304505

3. A bit more on $\langle \sigma v \rangle$: http://arxiv.org/abs/1311.4508

4. Boehm and Fayet: Scalar dark matter http://arxiv.org/abs/hep-ph/0305261

5. (non-WIMP) Axion cosmology; appendix also contains a fit to $g_\star$ and $g_{\star s}$ http://arxiv.org/abs/0910.1066

6. Beyond the WIMP: Baer et al. http://arxiv.org/abs/1407.0017

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[1] My brief tutorial on CLASS: http://www.ippp.dur.ac.uk/~avincent/CLASS_yeti_notes.pdf

III. DARK MATTER DETECTION

A. Indirect detection

1. A poor particle physicist cookbook for dark matter indirect detection (final state spectra, for various annihilation channels, CR propagation functions, J factors, different fluxes): http://www.marcocirelli.net/PPPC4DMID.html
2. Cholis and Salucci: Extracting limits on Dark Matter annihilation from gamma-ray observations towards dwarf spheroidal galaxies (example of how to get limits) http://arxiv.org/abs/1203.2954
3. Some recent constraints from Fermi data: http://arxiv.org/abs/1510.00389, http://arxiv.org/abs/1310.0828
4. The GC excess (one of many refs) Daylan et al. http://arxiv.org/abs/1402.6703
5.

B. Direct detection

1. Cerdeño and Green: Direct detection of WIMPs http://arxiv.org/abs/1002.1912
2. Cirelli: Tools for model-independent bounds in direct dark matter searches (non-relativistic operators) http://www.marcocirelli.net/NROpsDD.html
3. Nuclear form factors, EFT of direct detection: Fitzpatrick et al: http://arxiv.org/abs/1203.3542, Catena http://arxiv.org/abs/1512.06254
4. Simplified models and direct detection: Dent et al. http://arxiv.org/abs/1505.03117

C. Other signatures

1. The CMB: http://arxiv.org/abs/1303.5094; see also papers by Slatyer, e.g. http://arxiv.org/abs/1506.03812
2. Charged DM: McDermott et al. Turning off the Lights: How Dark is Dark Matter? http://arxiv.org/abs/1011.2907
3. DM in the Sun: http://arxiv.org/abs/1504.04378
4. An example of using cosmology to exclude an ID model: http://arxiv.org/abs/1602.01114