Evidence:

Galactic Rotation Curves – Zwicky and Oort (2,16).

Virial Theorem to the Coma cluster

Rotational velocity of galaxies using redshift of atomic emission lines, luminosity mass measurements doesn’t match mass expectation from Newton’s laws

Gravitational Lensing –

Describe gravitational lensing and how to get mass from it

Abell 383 (STSE03 in literature)

Bullet Cluster/1E0657-558 (14,19,20)

Cosmology – Baryon acoustic oscillations and CMB (5,7,15,17)

DM Candidates: (maybe add historical experiments)

Standard model DM:

-See Dan Hoopers talk (~20 minutes in) https://www.youtube.com/watch?v=aMWCkcn7TD4

-baryonic MACHOs (ruled out by big bang nucleosynthesis and Hubble) (9,15)

-nonbaryonic neutrinos (ruled out by structure formation) (22, 23)

Nonstandard model DM:

-axions (solving strong CP problem) (24,26,27-31)

-WIMPs

-freeze out argument (35)