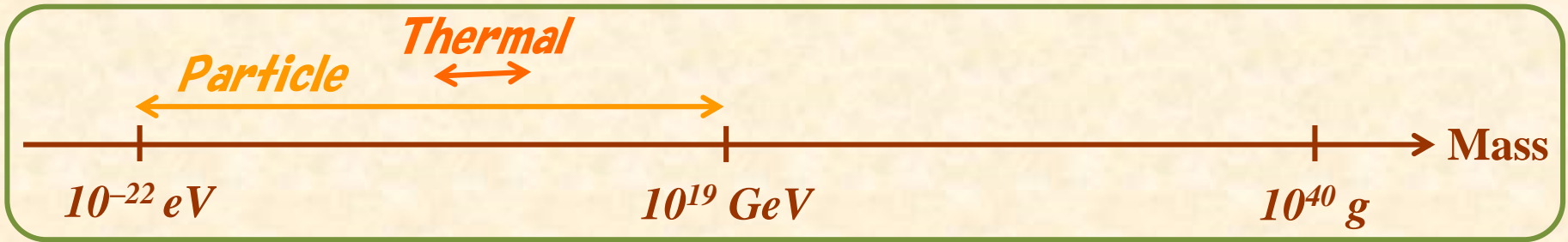


Dark matter is (almost) stable, neutral, cold & weak interacting. Its mass is ...



What is DM?
 $10^{-22} \text{ eV} < m < 10^{40} \text{ g}$

Particle
 $10^{-22} \text{ eV} < m < 10^{19} \text{ GeV}$

Eg. PBH
Non-particle

Thermal
 $10 \text{ MeV} < m < 10^5 \text{ GeV}$

Eg. Axion, ν_R , Fuzzy DM
Non-thermal

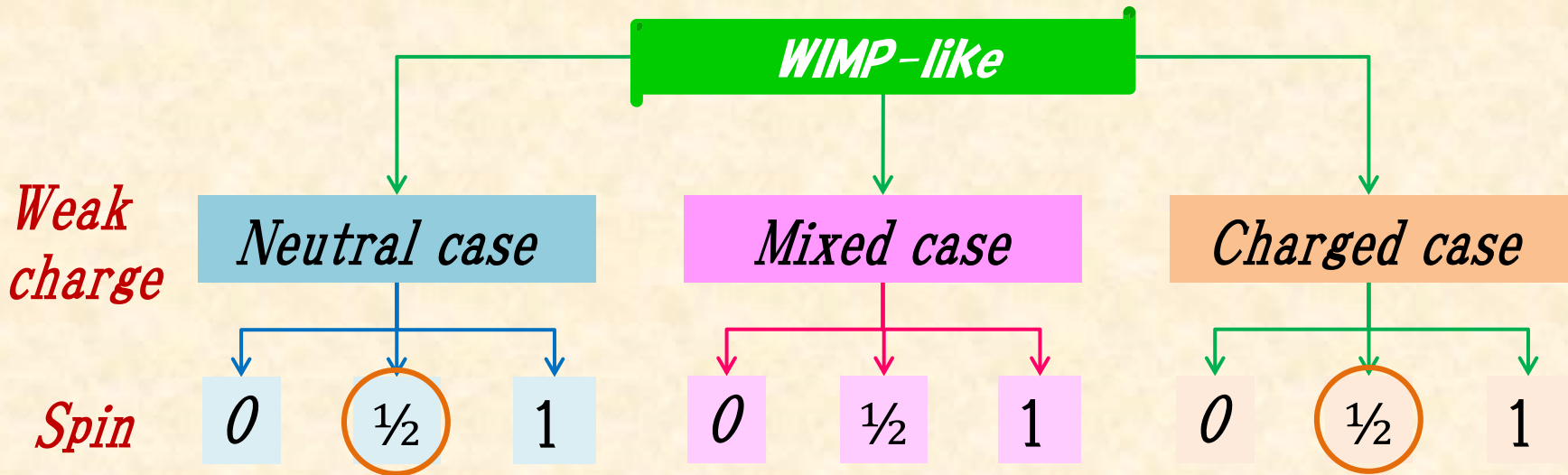
Freeze-out

Asymmetric

WIMP-like

SIMP-like

Semi-annihilation



<i>DM candidates</i>	<i>Motivation</i>	<i>Signal @ Lepton Collides</i>
✓ <i>CPV H-funnel DM</i>	<i>Anti-p excess</i>	<i>Invisible Higgs decay</i>
✓ <i>Leptophilic DM</i>	<i>$g_\mu - 2$</i>	<i>Mono-γ process</i>
✓ <i>Light DM</i>	<i>Small scale crisis</i>	<i>Exotic Higgs decay</i>
✓ <i>$SU(2)_L$ doublet DM</i>	<i>SUSY naturalness</i>	<i>Direct prod. ($\chi^+\chi^-$, $\chi^0_1\chi^0_2$)</i> <i>Oblique correction, etc</i>