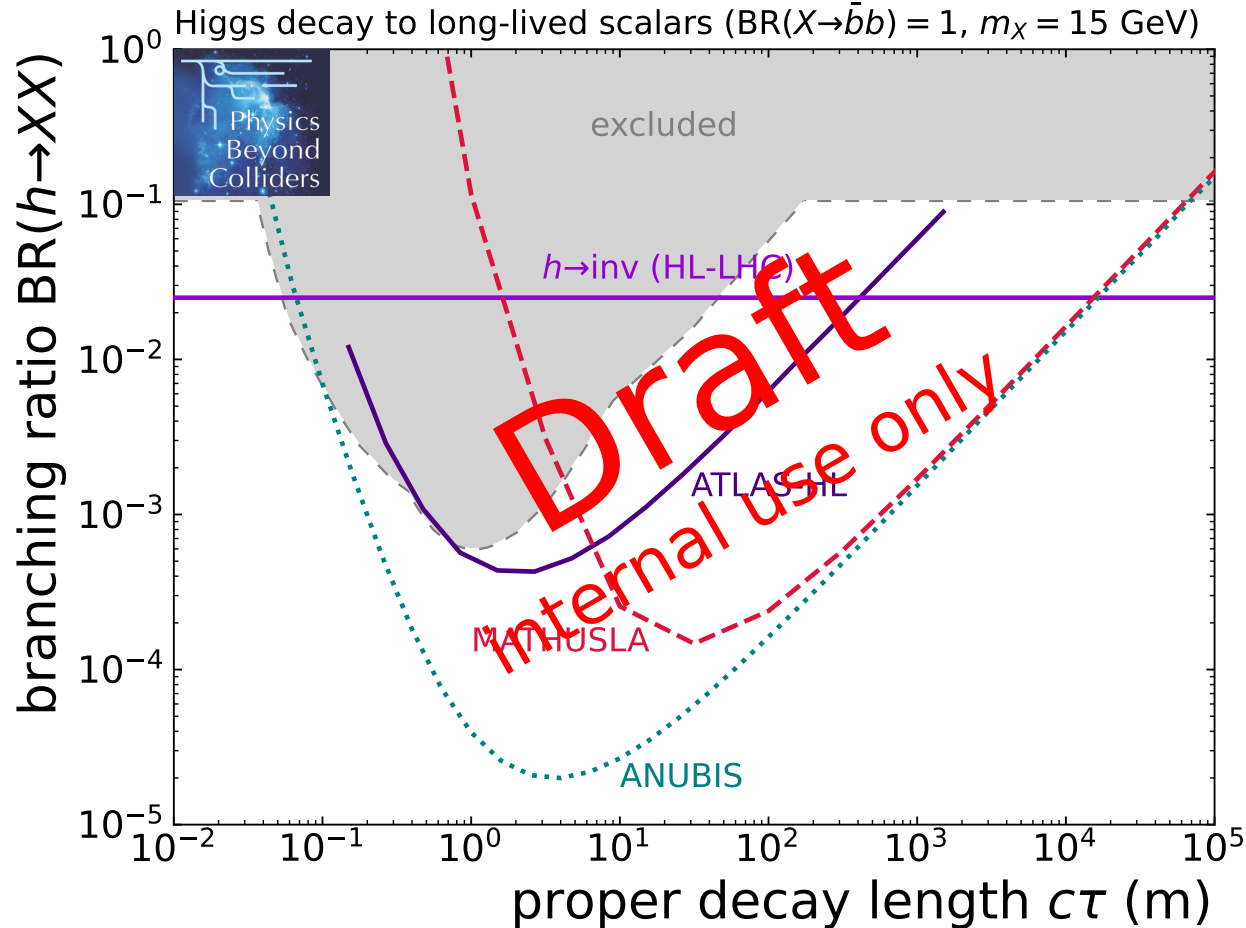


Higgs decay to long-lived scalars



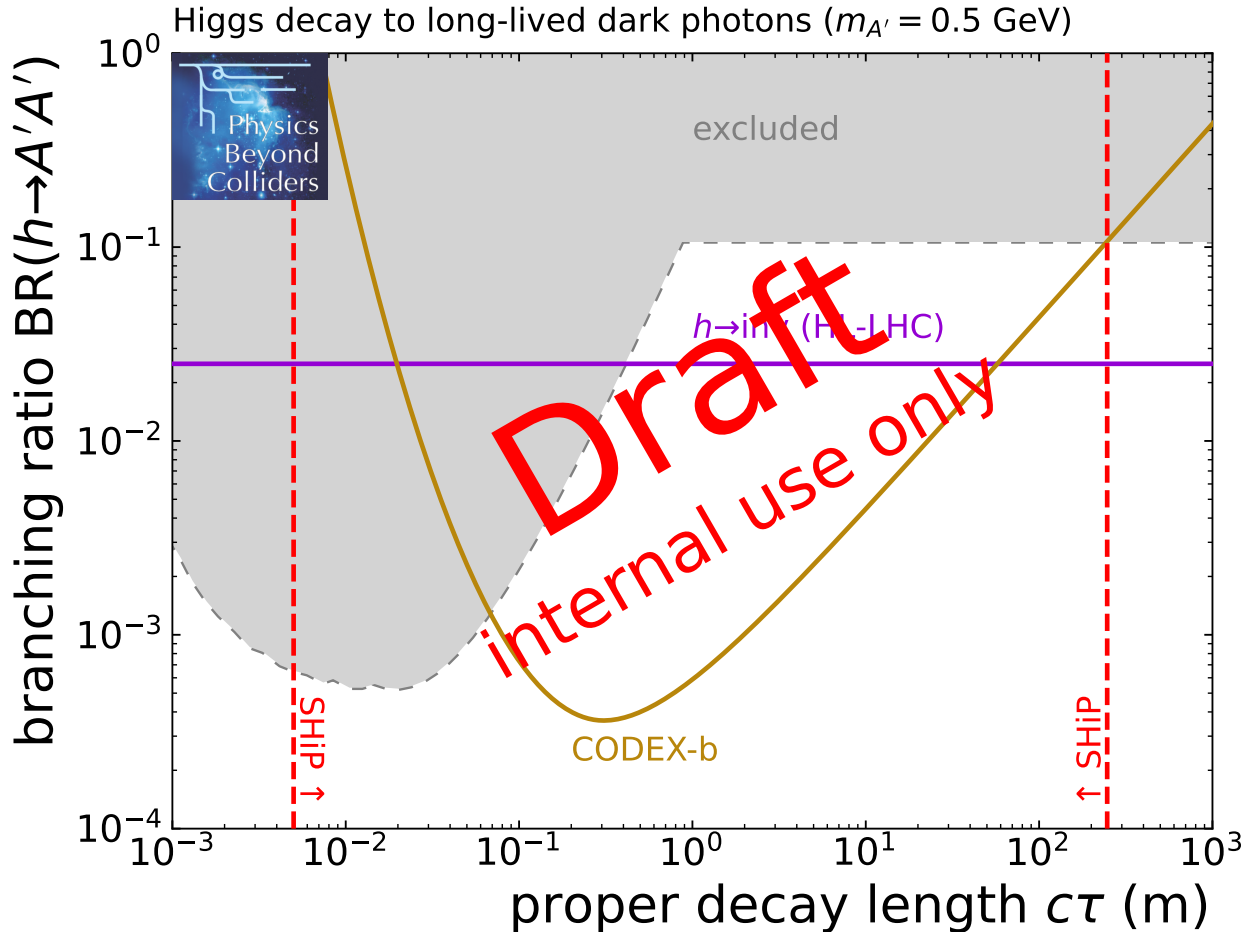
Note:

- ANUBIS projection obtained by interpolating between 10 GeV and 20 GeV

Open questions:

- Is there a Codex-b curve that we can add to this plot?

Higgs decay to long-lived dark photons



Note:

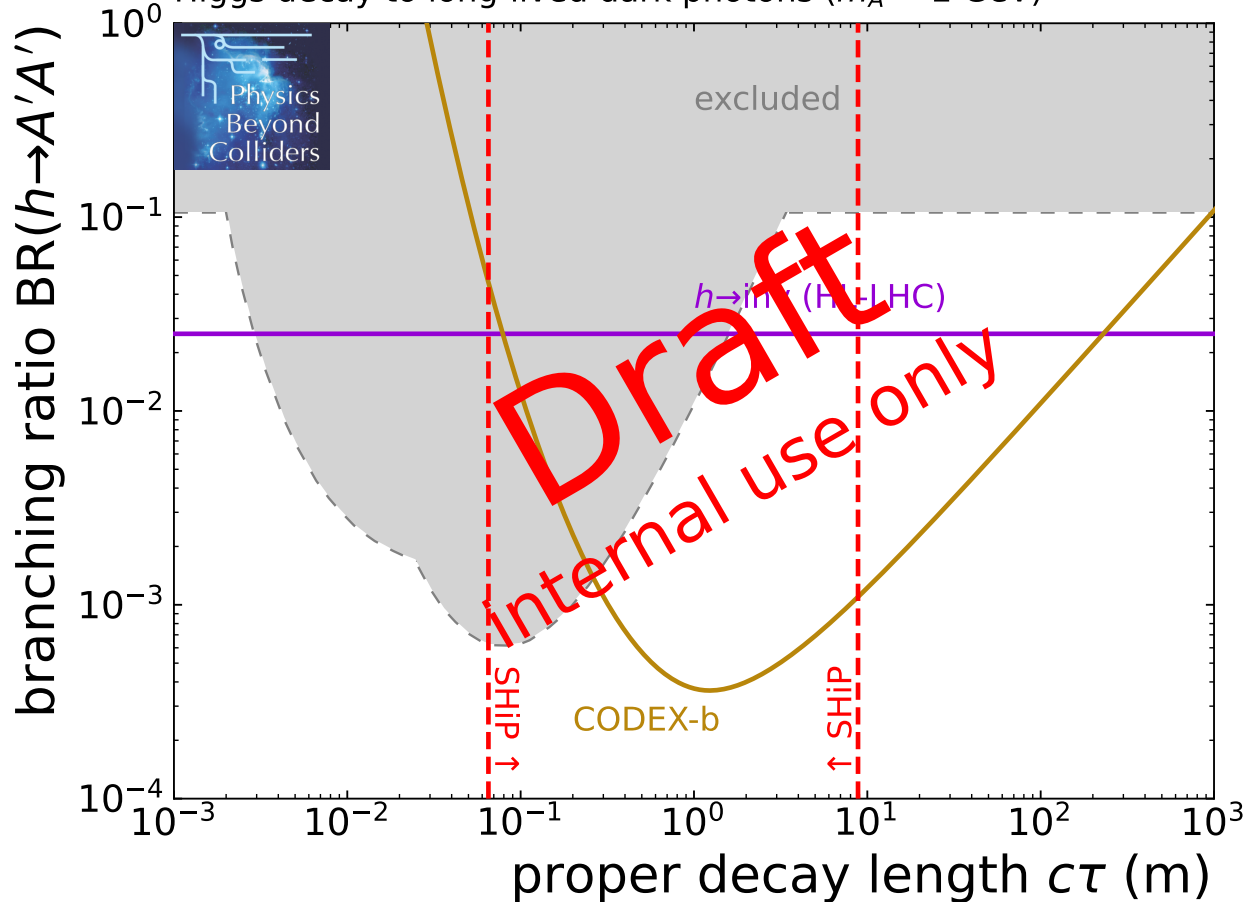
- ATLAS exclusion rescaled from 0.4 GeV to 0.5 GeV
- SHiP bound assumes dark photon production via kinetic mixing only

Open questions:

- Is this a good showcase model for Codex-b?

Higgs decay to long-lived dark photons

Higgs decay to long-lived dark photons ($m_{A'} = 2$ GeV)



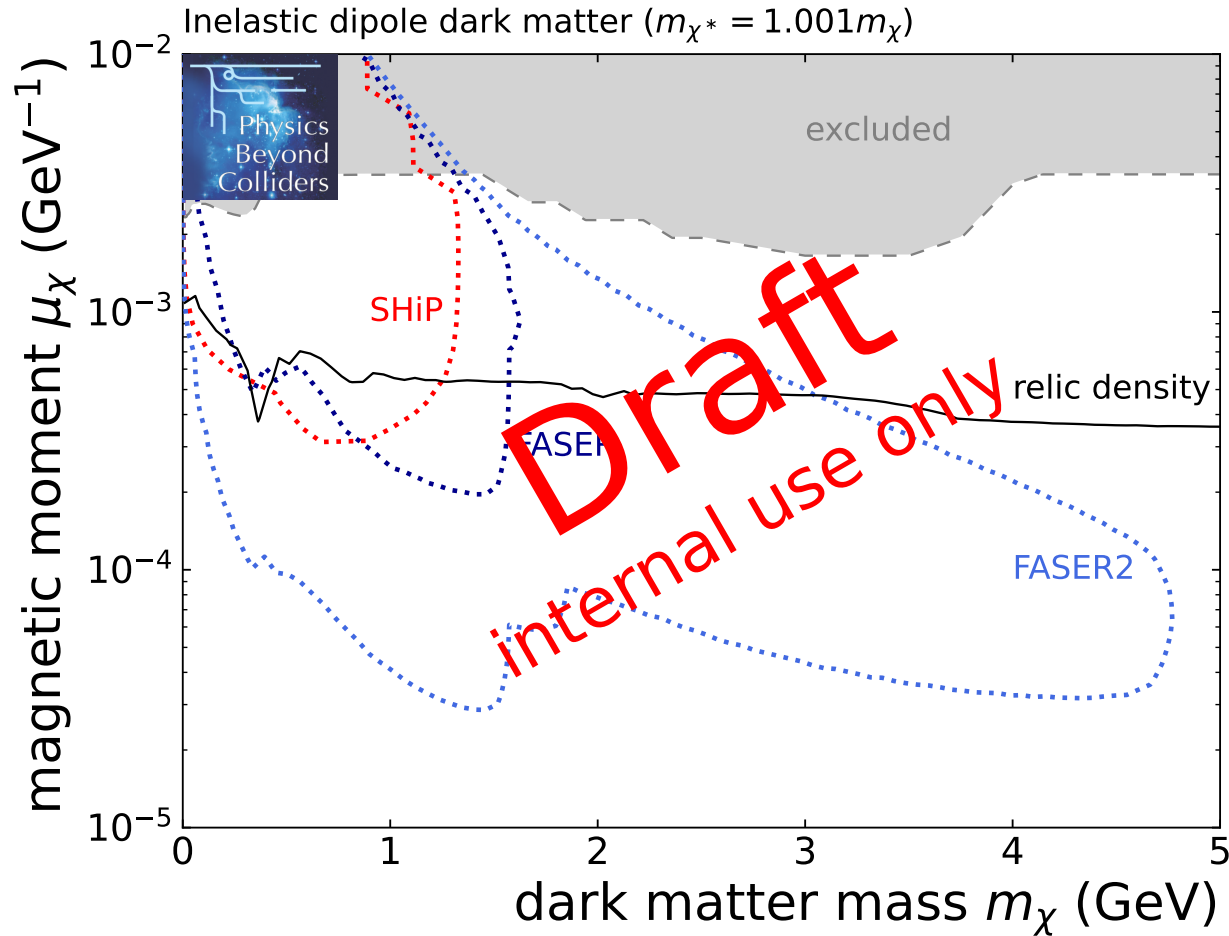
Note:

- No reinterpretation of ATLAS bound necessary
- CODEX-b bound obtained by rescaling (for now)
- No MATHUSLA/ANUBIS bounds available

Open questions:

- Can we improve the sensitivity projection for SHiP including B decays?

Inelastic dipole dark matter



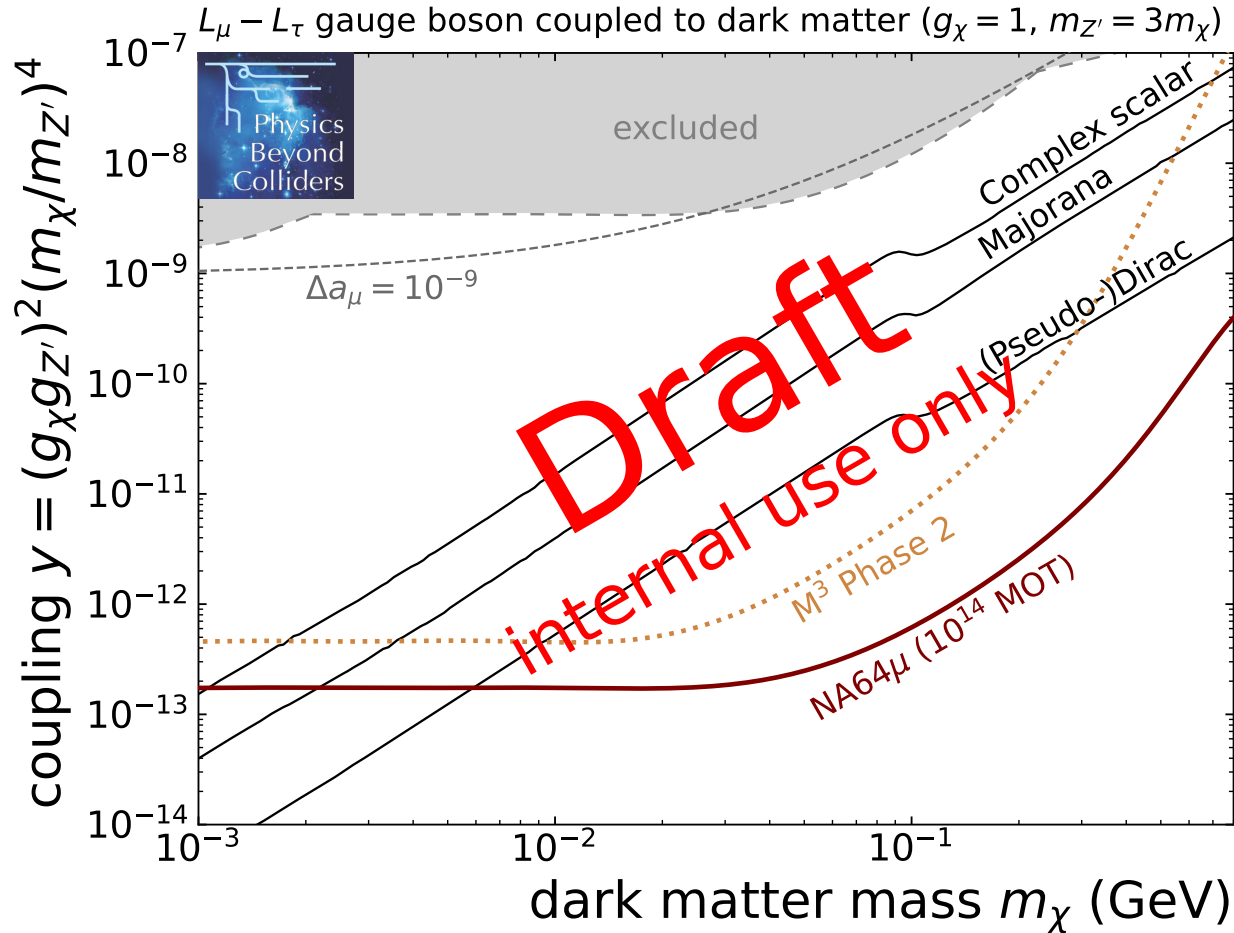
Note:

- SHiP projection outdated

Open questions:

- Should we remove the SHiP projection or can we update it?

$L_\mu - L_\tau$ gauge boson coupled to dark matter



Note:

- $g - 2$ line could become something like an upper bound if disagreement between theory and experiment disappears

Open questions:

- Is anything missing?
- Are we happy to show M^3 ?