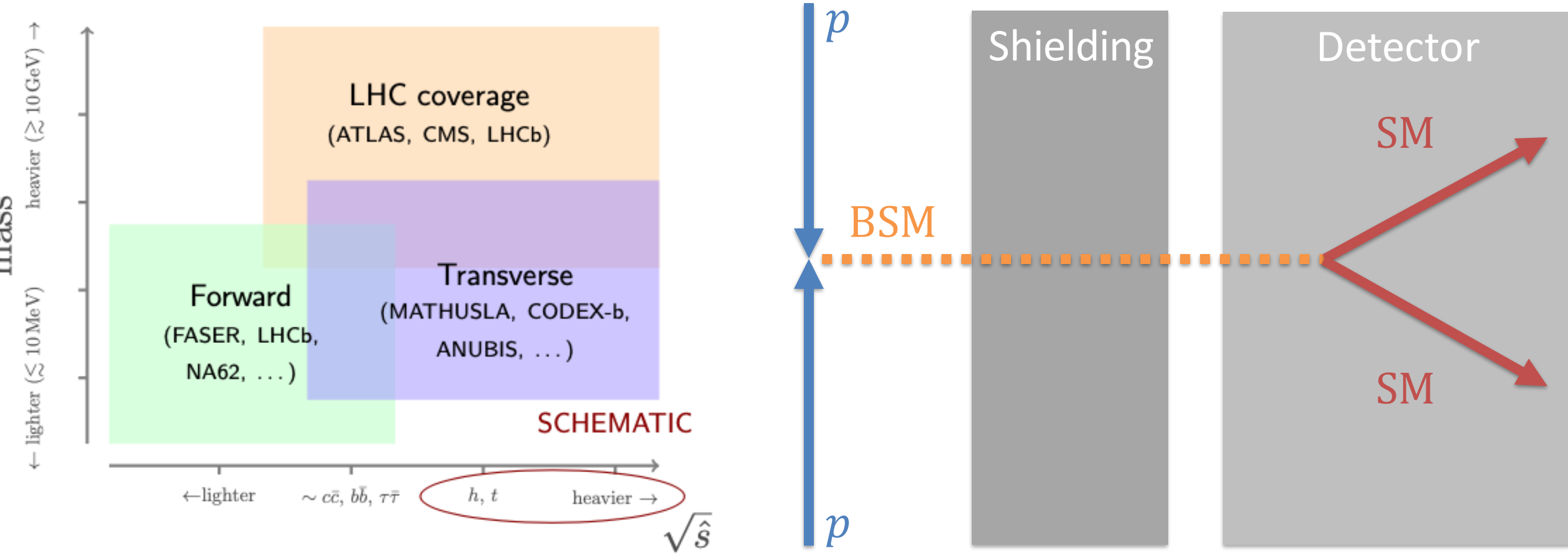


# The need for a shielded, transverse detector for LLPs



Long-lived particles (LLPs) are ubiquitous in **Beyond Standard-Model (BSM)** physics, and dedicated **transverse detectors** are needed at the LHC to search for their couplings to, *e.g.*, **the Higgs**

$\mathcal{B}(h \rightarrow \text{invisible}) < 19\%$  (PDG)  
invisible New Physics...?

ANUBIS proposal: [arXiv:1909.13022](https://arxiv.org/abs/1909.13022)  
CODEX-b proposal: [arXiv:1708.09395](https://arxiv.org/abs/1708.09395)  
CODEX-b expression of interest: [arXiv:1911.00481](https://arxiv.org/abs/1911.00481)  
CODEX-b Snowmass whitepaper: [arXiv:2203.07316](https://arxiv.org/abs/2203.07316)