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A Composite Mediator PHILIP TANEDO, Univ of California - Riverside — The WIMP framework naturally connects dark matter to electroweak naturalness, but most of the parameter space has been ruled out experimentally. One alternative is a dark sector with light mediators, though these constructions are typically unrelated to stabilizing the Higgs mass. We present a class of models that extend the composite Higgs proposal to include a composite mediator. We identify models in this framework that are predictive with few parameters and embed the dark sector into an extended electroweak sector. The models tie together the naturalness of the Higgs with the phenomenological properties of the dark sector.

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