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[YSF] The unexplored landscape of two-body resonances

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We propose a strategy for searching for theoretically-unanticipated new physics. Searches for resonances decaying into pairs of visible particles are experimentally very powerful due to the localized mass peaks and have a rich history of discovery. Yet, due to a focus on subsets of theoretically-motivated models, the landscape of such resonances is far from thoroughly explored. We survey the existing set of searches, identify untapped experimental opportunities and discuss the theoretical constraints on models which would generate such resonances. The landscape could provide insight on the future of Dark matter mediator search strategies. arXiv:1610.09392

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