

Abstract Submitted  
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**Decays of an exotic  $1^{-+}$  hybrid meson resonance in QCD** JOZEF DUDEK, William Mary — For the first time using lattice QCD we determine an exotic  $1^{-+}$  hybrid meson appearing as a resonance in coupled-channel scattering. The calculation, performed with an exact SU(3) flavor symmetry, suggests that the hybrid has a large coupling to at least one axial-vector – pseudoscalar channel. A simple extrapolation to the physical light quark mass suggests a broad  $\pi_1$  decaying dominantly through the  $b_1\pi$  mode. Based upon material presented in arXiv:2009.10034 by A.J. Woss, J.J. Dudek, R.G. Edwards, C.E. Thomas and D.J. Wilson for the Hadron Spectrum Collaboration

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