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Abstract for an Invited Paper for the APR11 Meeting of the American Physical Society

The Meson Spectrum from Lattice QCD

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I will report on recent progress in extracting the spectrum of excited mesons from lattice QCD computations. Spectra of mesons across all J^{PC} with $J \leq 4$ are now accessible with multiple excited states in each channel. Exotic hybrid meson results of unprecedented statistical precision suggest that these enigmatic states should indeed be within the energy reach of the GlueX experiment at JLab 12 GeV. I will also discuss current attempts being made to study the decay of resonances within QCD and how lattice QCD results can be used to build phenomenological models constrained by non-perturbative QCD.