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Abstract for an Invited Paper for the SES19 Meeting of the American Physical Society

Overview of JLab Primakoff Program¹

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The light pseudoscalar meson decays provide a unique laboratory to test fundamental QCD symmetries at low energy. A comprehensive Primakoff experimental program at Jefferson Laboratory (JLab) is aimed at gathering high precision measurements of the two-photon decay widths and the transition form factors at low four-momentum transfer squares for π^0 , η and η' via the Primakoff effect. The results of these measurements will offer stringent tests of the chiral anomaly and provide sensitive probes for the origin and dynamics of chiral symmetry breaking. The status of these experimental activities and their physics impacts will be discussed.

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