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**Merger Signatures in Cold Quasars** CASEY CARLILE, ALLISON KIRKPATRICK, University of Kansas, EILAT GLIKMAN, Middlebury College — Cold Quasars ( $L_x > 10^{44}$  erg/s,  $S_{250} > 30$  mJy) are a recently discovered, extremely rare galaxy. They are luminous in both the X-ray and infrared wavelengths and can have up to seven times as much star formation as normal quasars. They are predicted to be a step in the progression between the starburst galaxies that have undergone a recent galaxy merger and blue, unobscured quasars. However, they mainly look like blue point sources in Sloan Digital Sky Survey imaging. In order to test whether Cold Quasars are produced by mergers, we examine the deep images from the Hyper Suprime-Cam of the Subaru Telescope. We fit multiple models using GALFIT to look for double nuclei or asymmetrical residuals. We find that Cold Quasars are more asymmetrical than a control sample of unobscured, blue quasars, supporting a scenario in which the Cold Quasar phase occurs at the very end of a merger, directly preceding blow out and quenching.

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