

Abstract Submitted
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Identifying and Characterizing Radio-Mode Active Galactic Nuclei (AGN)¹ LARK WANG, EMIL NOORDEH, ASHLEY KING, REBECCA CANNING, STEVEN ALLEN, Stanford University, SOUTH POLE TELESCOPE COLLABORATION — Supermassive black holes which sit at the centers of galaxies can launch jets of highly relativistic particles which we observe primarily in the radio wavelengths. These jets can carry enough energy to prevent further growth of their host galaxy and even affect the larger-scale environment of galaxies. Key questions remain about how these jets can dissipate energy and under what conditions they are launched. We are studying such jets in the most massive galaxies which reside in galaxy clusters. I will present results from preliminary attempts to identify and characterize radio-bright supermassive black holes using traditional detection techniques and a convolutional neural network.

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