



Brown Dwarf Jets: Investigating the Universality of Jet Launching Mechanisms at the Lowest Masses

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Recently it has become apparent that proto-stellar-like outflow activity extends to the brown dwarf (BD) mass regime. While the presence of accretion appears to be the common ingredient in all objects known to drive jets fundamental questions remain unanswered. The more prominent being the exact mechanism by which jets are launched, and whether this mechanism remains universal among such a diversity of sources and scales. To address these questions we have been investigating outflow activity in a sample of protostellar objects that differ considerably in mass and mass accretion rate. Central to this is our study of brown dwarf jets. To date Classical T Tauri stars (CTTS) have offered us the best touchstone for decoding the launching mechanism. Here we shall summarise what is understood so far of BD jets and the important constraints observations can place on models. We will focus on the comparison between jets driven by objects with central masses $< 0.1 M_{\odot}$ and those driven by CTTSs. In particular we wish to understand how the the ratio of the mass outflow to accretion rate compares to what has been measured for CTTSs.

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