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Laboratory Study of Angular Momentum Transport in Astrophysical Accretion Disks HANTAO JI, Princeton University — Studying astrophysical processes in the lab becomes increasingly possible and exciting, as one of Stirling's favorite subjects throughout his scientific career. In this talk, I will describe experimental efforts to study mechanisms of rapid angular momentum transport required to occur in accretion disks to explain a wide range of phenomena from star formation, energetic activity of cataclysmic variables, to powering quasars, the most luminous steady sources in the Universe. By carefully isolating effects due to artificial boundaries, which are inherent to terrestrial experiments, certain astrophysical questions regarding hydrodynamic and magnetohydrodynamic stabilities are being addressed in the laboratory. Inspirations from Stirling as well as scientific exchanges with him will be mentioned during this talk as part of my scientific journey on this subject.

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