

Abstract Submitted  
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**Magneto-Rotational Turbulence and Dynamo Action**<sup>1</sup> FAUSTO CATTANEO, University of Chicago — The magneto-rotational instability (MRI) is commonly invoked as the primary source of turbulence in accretion disks. Although the instability requires a magnetic field to develop, in certain cases, the resulting turbulence can act as a dynamo and can regenerate the magnetic field needed to enable the instability. This self-consistent loop offers an attractive universal mechanism for magnetization of accretion disks. In this talk we examine the evidence, mostly numerical, supporting the idea that MR turbulence could be self-sustaining. In particular we shall discuss the effects of boundary conditions, stratification and dissipative processes on the type of dynamo action that is possible in a disk.

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