

## **Accretion-Ejection Instability in magnetized disks, and low-frequency QPOs in GRS 1915+105**

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I will show that an Accretion-Ejection Instability may exist in the inner regions of magnetized accretion disks. It appears as a large scale, coherent spiral structure in the disk, whose properties make it a very good candidate to explain the low frequency QPOs ( $\sim 1Hz$ ) observed in X ray binaries. The instability proceeds by extracting angular momentum from the inner region of the disk; this momentum will end up emitted as Alfvén waves toward the corona of the disk, where it might energize a jet or wind. The instability appears when the magnetic pressure becomes comparable with the thermal pressure of the disk.

I will then discuss how this instability compares with the observations of a low-frequency QPO in the low state of the micro-quasar GRS 1915+105. This leads to a consistent scenario for the  $\sim 30$  mn cycles of this source, associated with relativistic ejections. In this “Magnetic Flood” scenario, the cycles are controlled by the accumulation of magnetic flux in the disk.