

## **PARTICLE ACCELERATION IN ROTATING AND SHEARING AGN JETS**

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Several arguments suggest that the outflowing plasma in AGN jets is also characterized by rotation upon the jet axis. The present contribution thus considers the transport of energetic particles which are scattered by magnetic inhomogeneities moving with the background flow, following previous work done by Webb (1989) and Webb, Jokipii & Morfill (1994). The steady state distribution of particles accelerated by centrifugal and shear effects is evaluated for a simple model incorporating rigidly and keplerian rotation flow profiles. It is shown in particular that under special conditions a power-law particle momentum spectrum may be recovered if the mean scattering time is an increasing function of momentum, in agreement with the results derived by Berezhko & Krymskii (1981). The relevance of shear acceleration in addition to Fermi-type particle acceleration in AGN jets is pointed out with reference to recent observations.