Invited Lecture

MODELLING BROAD EMISSION LINES IN ACTIVE GALACTIC NUCLEI

B. Czerny

Center for Theoretical Physics, Al. Lotnikow 32/46, 02-668 Warszawa, Poland E-mail: bcz@cft.edu.pl

Broad Emission Lines are the most characteristic features of Active Galaxies, but the mechanism of creating a medium able to emit these intense lines is not quite clear. Observations clearly indicate that the motion of the material is predominantly Kepelrian, with tracses of inflow and outflow, but this still does not point out whether the lines partially come from the disk surface, or exclusively from the circumnuclear material, and whether this material originates from the disk as a wind, or comes, at least partially, from outside. I review the basic scenarios for the formation of the Broad Line Region, and the recent progress in modelling the physical conditions in the emitting medium.