

## DIRECTIVITY PATTERN SIMULATION OF THE JET RADIO EMISSION IN AN AGN MODEL

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Recently the 1.5 years flux observations of a quasar 0235+16 at 8 frequencies have been explained by the emission of a jet in a strong radial magnetic field of an AGN (in accordance with the Hedgehog model, suggested by N.S.Kardashev in 1969; see poster by Kovalev Y.Y. and Larionov G.M. to this Symposium). Results of the numerical calculations are presented on the Fig.1 as a function on the angle  $\theta$  from the jet axes,  $0.5^\circ < \theta < 90^\circ$ , at the normalized frequencies  $\nu/\nu_{m00}=4; 1; 1/4$  and  $1/16$  (labeled near the curves). Directivity pattern will have a minimum at  $\theta=0^\circ$  (do not showed on the Fig.1), caused by the jet emission, observed inside the angles  $0^\circ < \theta < \varphi$ , where  $\varphi$  is a jet corner angle. As a result a maximum at  $\theta=\varphi$  or  $\theta > \varphi$  will be obtained at all frequencies.

A possibility to observe such sources, orientated inside the beam to an observer in this model, is  $\sim 0.09$  at a frequency  $\nu_{m00}$ . It is at  $\sim 30$  time greater than in the relativistic jet model (Blandford and Koenigl, 1979) at this frequency, but is less than in it at frequencies less than  $\nu_{m00}/16$ . A frequency  $\nu_{m00}$  is a preferable frequency for a search of objects for this model. It is estimated as 18 GHz.

### References

Blandford R.D. and Koenigl A. 1979. *Asrophys. J.* V.232. P.34.

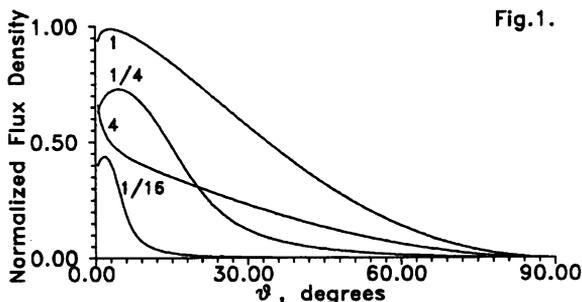


Fig.1.