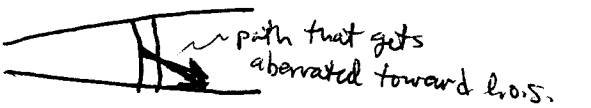
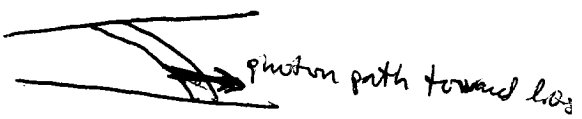
Aberration acts in a similar sense: radiation travels toward observer from each point in feature when the observer-frame view is adopted

e.g., $\theta = \frac{1}{2}\sin^{-1}(\frac{1}{\Gamma})$: In shock frame:

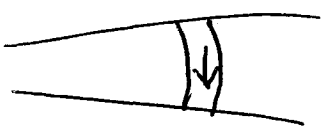


In observer frame:

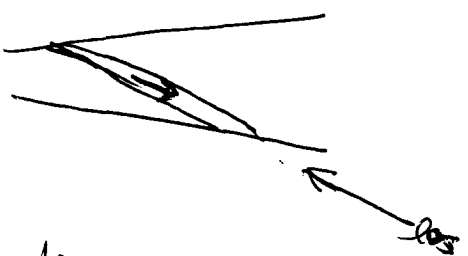


(not drawn exactly to scale)

$\theta = \sin^{-1}(\frac{1}{\Gamma})$: in shock frame:



in observer frame:



See Gómez et al. (1994, A+A, 292, 33) for equations + discussion of how to compute aberration + time delays in bent jets

IV. Synchrotron Self-Compton Emission + Energy Losses: A few notes

Already discussed by Dr. Kirk in δ-function approximation
- But δ-fn. approx. is only good if seed photon spectrum is strongly peaked, as for a blackbody

A. In SSC case (McHardy et al. 1999 MNRAS, 310, 571) all seed photons that can scatter up to ν (X-ray, γ-ray) contribute equally
→ lower-ν photons (abundant) are scattered by higher-E electrons (rare)
mid-ν γ's " " " mid-E e⁻s
higher-ν γ's (rare) " " " lower-E e⁻s (abundant)

B. During a flare, e⁻s need to wait for flare's seed photons to arrive → causes delay in SSC emission if $\theta \approx 0°$
(Sokolov, ♦ Marscher, + McHardy 2004, ApJ, submitted)