

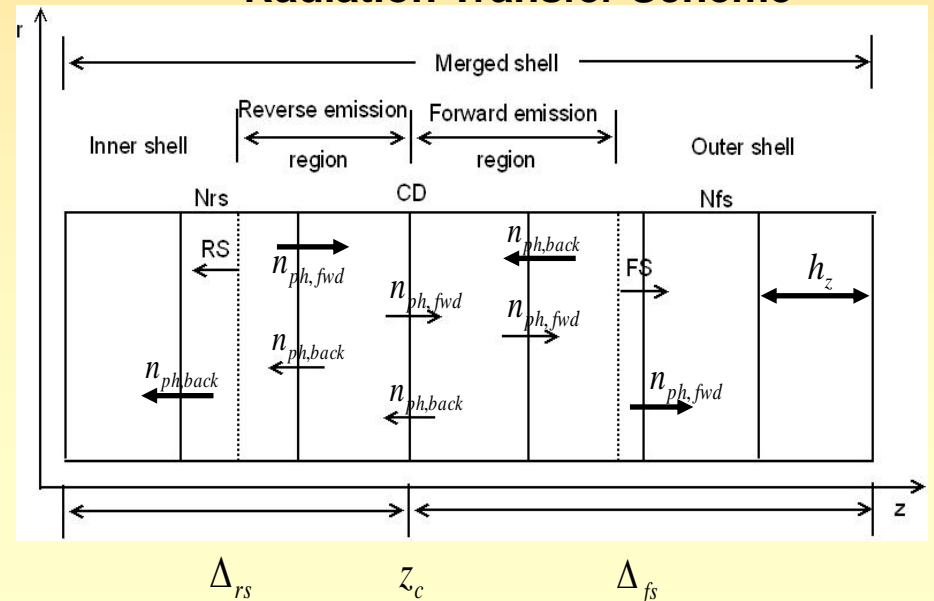
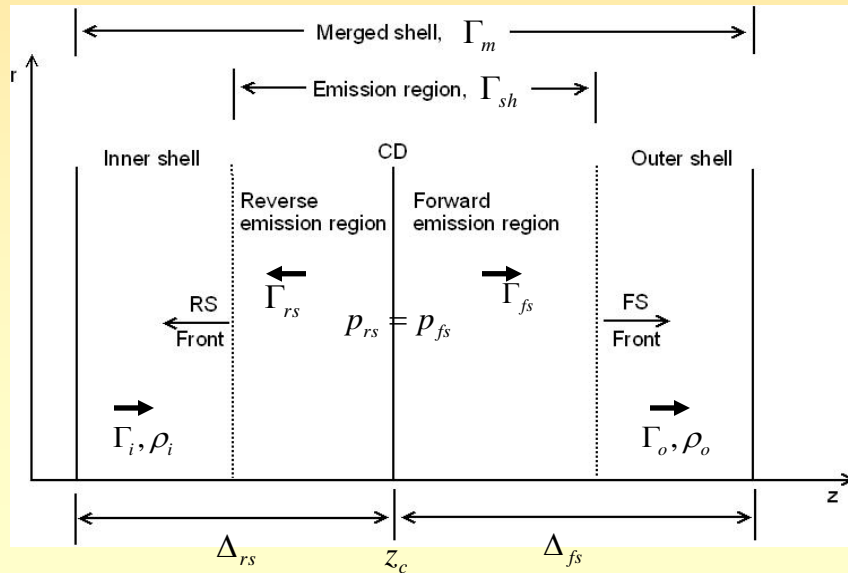
# Time-dependent Radiation Transfer in Internal Shock Model for Blazar Jets

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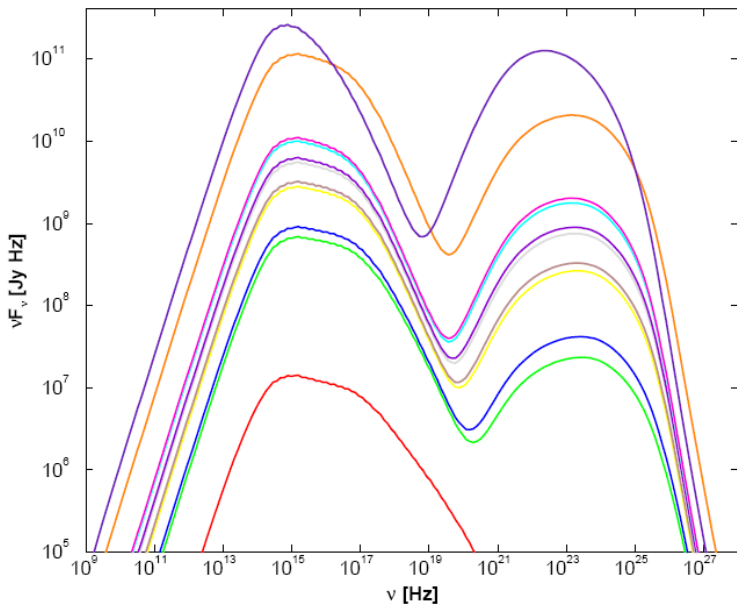
## Schematic of Internal Shock Model for a cylindrical geometry



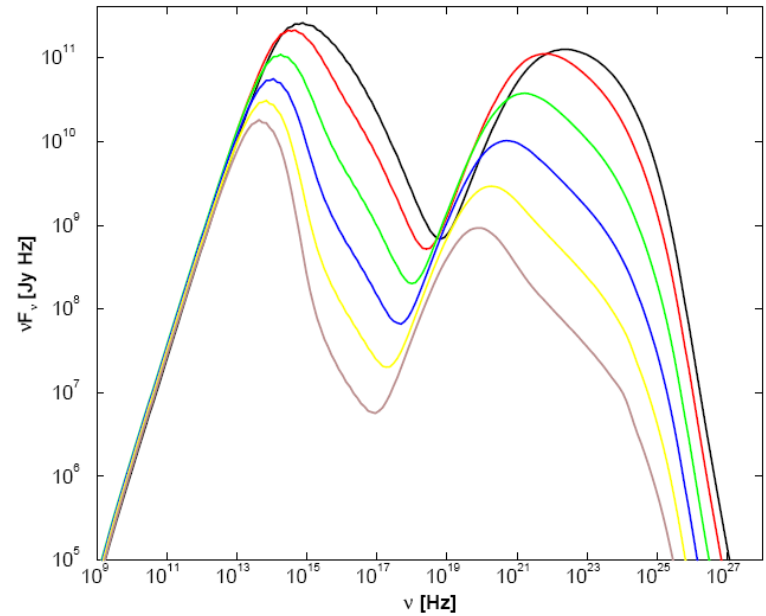
## Radiation Transfer Scheme



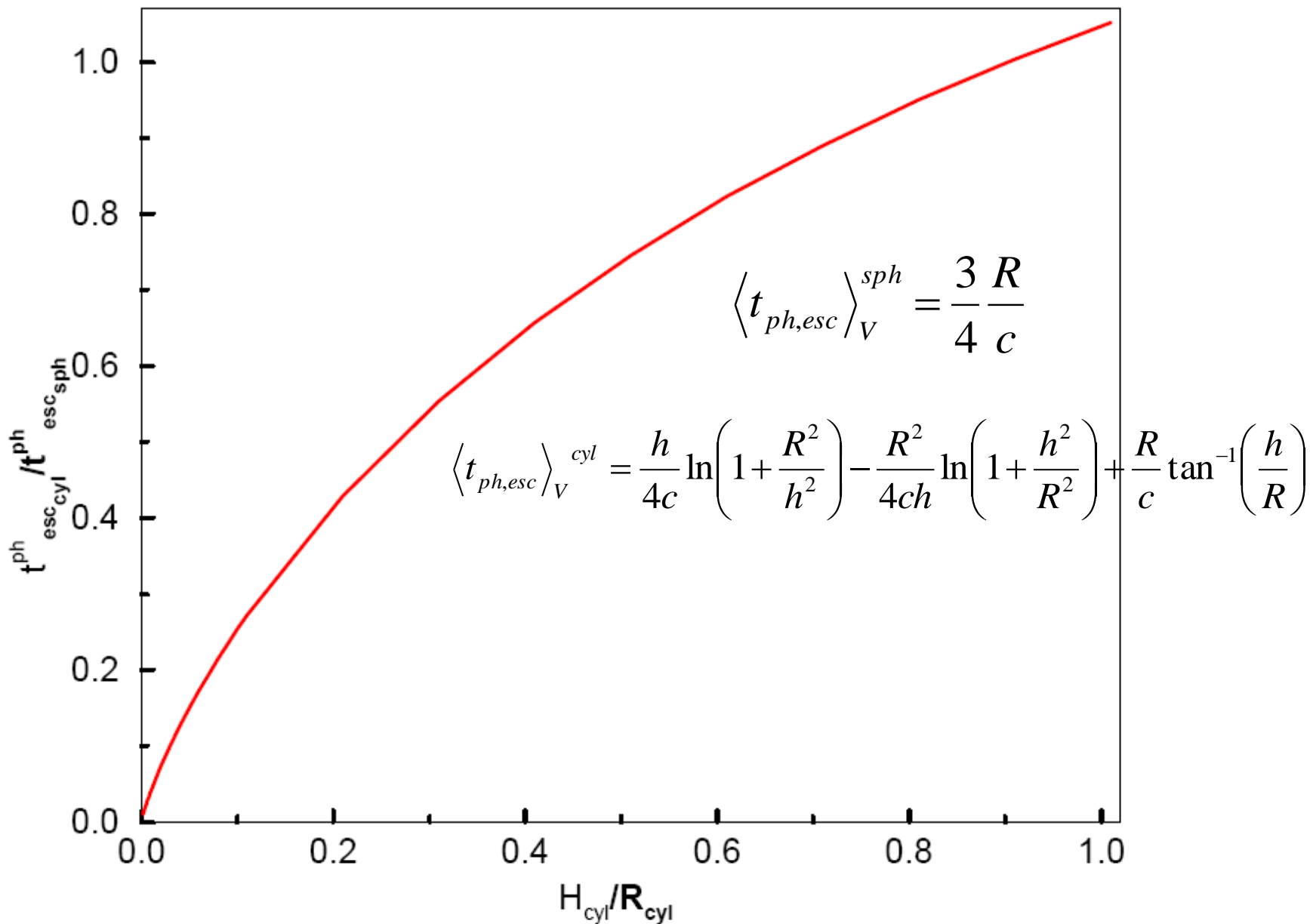
## Test run results for radiation transfer scheme



**Rising phase of emission**  
**Acceleration is dominant**



**Decaying phase of emission**  
**Cooling is dominant**



$$L_w = 1 \times 10^{48} \text{ ergs} / s$$

$$R = 3.59 \times 10^{15} \text{ cm}, \theta_{obs} = 2.4^\circ$$

$$t_w = 2 \times 10^2 \text{ s}$$

$$\Delta_o = 5 \times 10^{14}, M_o = 1 \times 10^{28} n_{fs} = 10, n_{rs} = 8$$

$$\Gamma_i = 10$$

$$\Delta_i = 1 \times 10^{14}, \hat{\gamma} = \frac{4}{3}$$

$$\Gamma_o = 15$$

$$\xi_e = 1 \times 10^{-3}, \varepsilon_e = 2 \times 10^{-3}, \varepsilon_B = 4 \times 10^{-4}$$