Transport Techniques (Numerical Schemes)

Moments and Moment Closure

Integrate $\mu^a \, d\Omega (a=0,1,\ldots)$

$a=0: \quad 1/c \; \partial J/\partial t = (j-\sigma_a)J - \nabla H$

$a=1: \quad 1/c \; \partial H/\partial t = C_1 \, H - \nabla K$

...

Flux-Limited Diffusion

$H = -c\Lambda\nabla J$ (Λ is the Flux Limiter)

Variable Eddington Factors

Close with K (Solve by iteration)

Can Also Solve Full Boltzman Eq.

S_n methods, Boltztran (Mezzacappa et al.), ...