



Description: The figure illustrates the spacetime region used to solve the wave equation within the expanding region. A sequence of finite problems is considered, starting from a solution ψ_R defined on Σ_R with prescribed data, and then showing that the limit $\lim_{R \rightarrow \infty} \psi_R$ exists in an appropriate energy space. This process is carried out up to a Σ_{r_0} hypersurface, where $r_0 > r_c$.