

- **Lindblad Petersen, Oliver: Wave equations with initial data on compact Cauchy horizons (203)**

I will present a new existence and uniqueness result for wave equations with initial data on compact Cauchy horizons in Lorentzian manifolds. As an application, we prove that any vacuum spacetime containing a compact Cauchy horizon with constant non-zero surface gravity admits a Killing vector field. This result is closely related to Penrose's strong cosmic censorship conjecture in general relativity.