

Some properties of globally hyperbolic spacetimes with timelike boundary.

LUIS ALBERTO AKÉ HAU

Universidad de Málaga
luisake@uma.es

ABSTRACT

In [1] the authors introduced spacetimes-with-timelike-boundary, that is manifolds with boundary such that the induced metric on the boundary is a Lorentzian metric. They extended the notions of strong causality and global hyperbolicity and showed that many results on spacetimes without boundary can be generalized to spacetimes with boundary. In our work we show further properties related with global hyperbolicity.

References

- [1] G. Galloway and D.A. Solis, *Global properties of asymptotically de Sitter and Anti de Sitter space-times*, Ph.D. thesis, University of Miami, 2006.
- [2] L. Aké, J.L. Flores and M. Sánchez, *Some properties of globally hyperbolic spacetimes with timelike boundary*, In progress.