Rym Smai: Globally hyperbolic maximal conformally flat spacetimes with complete photons

A conformally flat spacetime is an oriented and time-oriented Lorentzian manifold which is locally conformal to the Minkowski spacetime. The natural geometrical objects in a conformally flat spacetime are the non-parametrized isotropic geodesics, called photons. In this talk, I will define a notion of completeness of photons. Then, I will give some "classification" results on conformally flat spacetimes satisfying some nice assumptions of causality and containing complete photons. I will end up with some open questions around this topic.

Jeudi 24 novembre, 14h-15h, Amphithéâtre Yoccoz.