

Light, horizons and the geometry of space-time

Light has no mass, and propagates like no other massive particle: it follows the shortest path between two points in space-time, a path that is determined by the local geometry of the universe. This path is bent in the vicinity of mass concentrations, leading to relativistic phenomena such as gravitational lenses that distort our images of remote galaxies. Light propagates at a finite speed. This leads to the existence of fundamental cosmic horizons, beyond which no exploration is possible.

Classification de thématique: Introduction: the nature of light