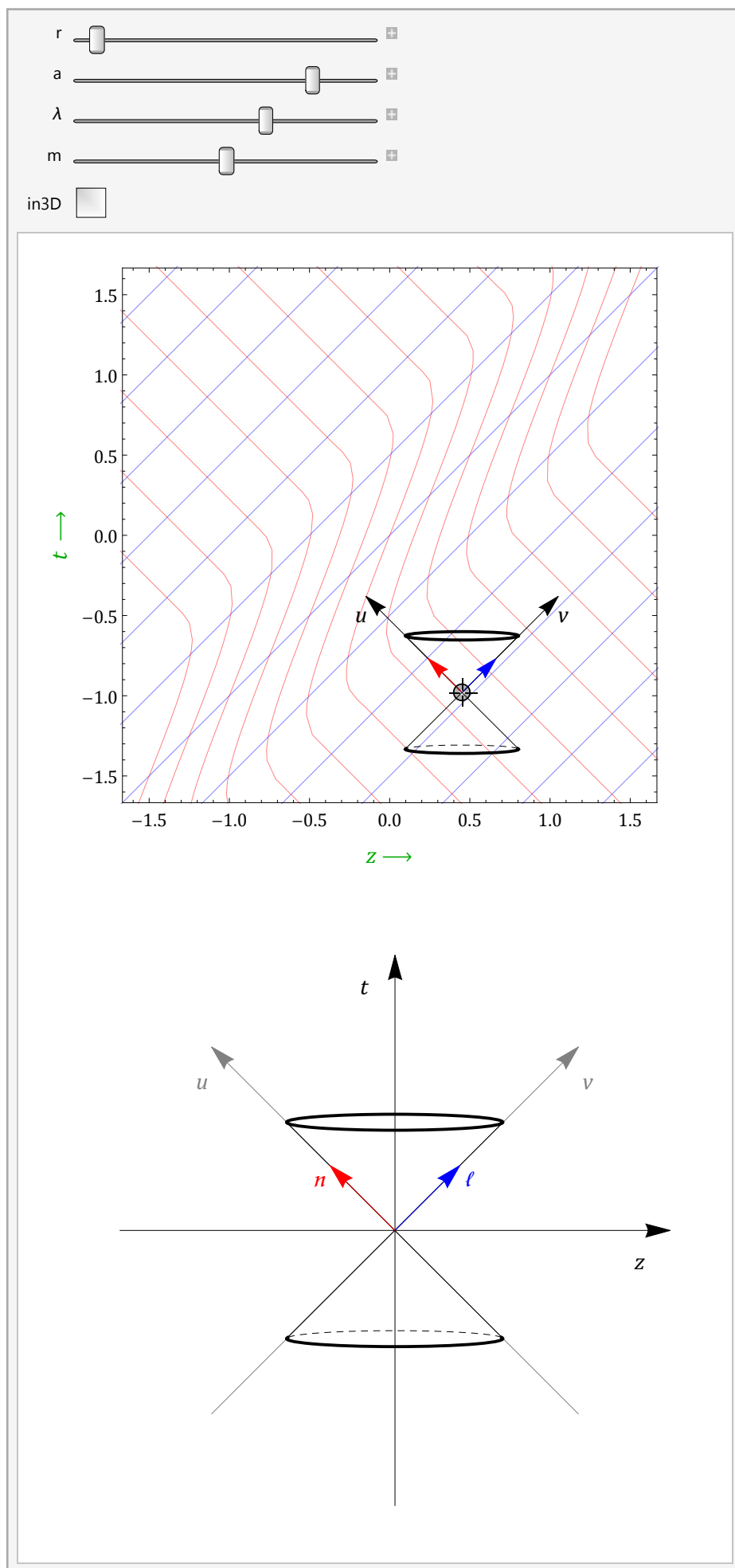


Causal structure / Causality Constraints on Massive Gravity (1610.02033)



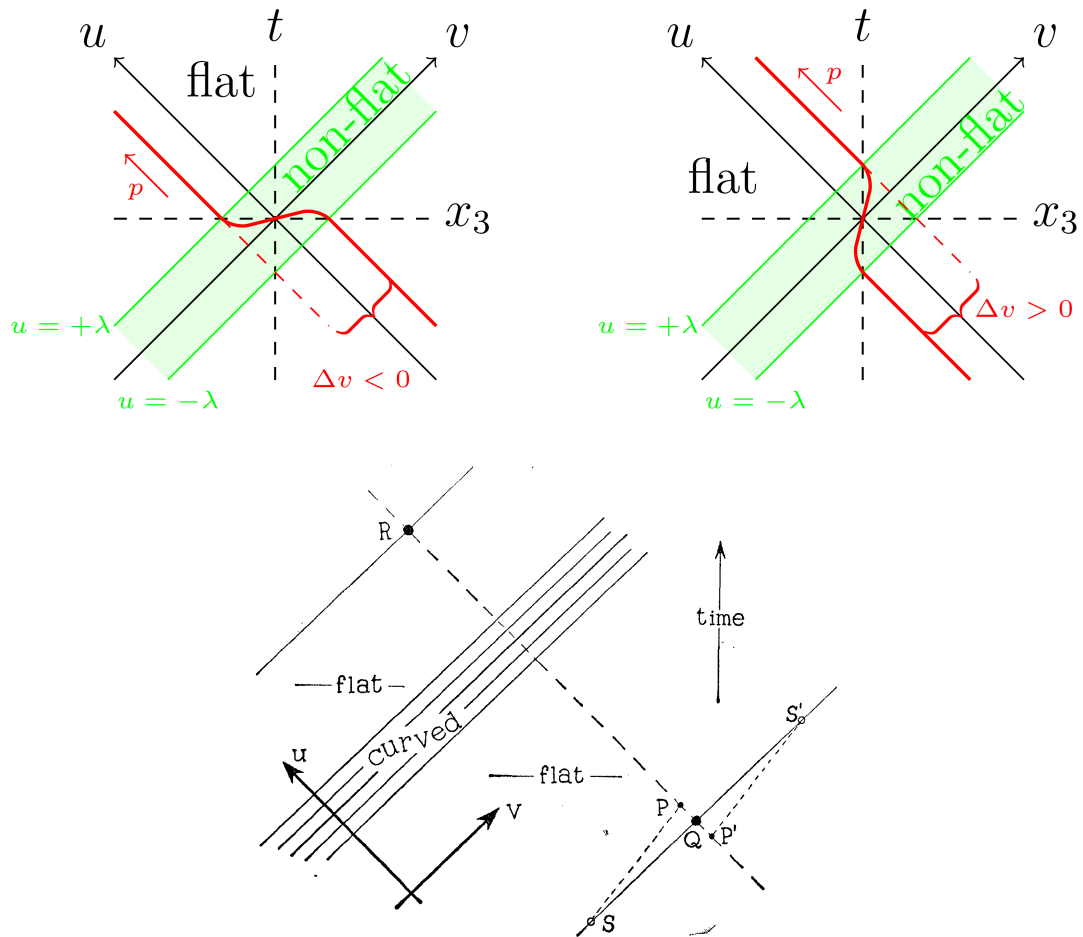


FIG. 1. The sandwich wave \mathcal{W}_4 and the related configuration of points mentioned in the test. The diagram essentially represents the two-dimensional section of \mathcal{W}_4 by $x_i = 0$.

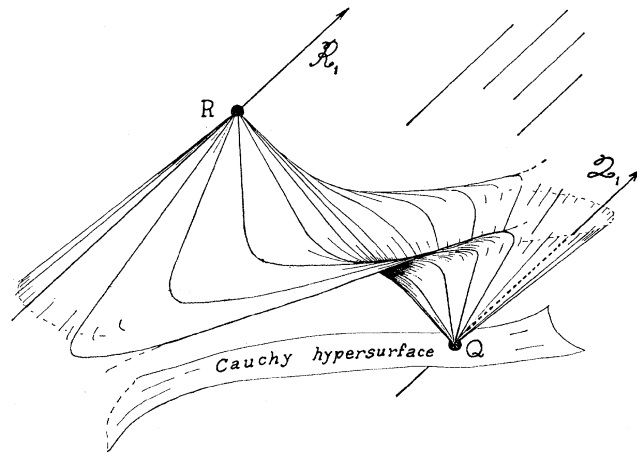


FIG. 2. The purely electromagnetic plane-wave space-times have exact analogs in two space and one time dimension. A null cone can be focused again to a second vertex. The situation is depicted above. A connected spacelike surface through Q can never meet the null line \mathcal{R}_1 (if the surface has no boundary).