Advanced Topics in Geometry B1 (MTH.B406)

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2025/08/01 (Corrected: 2023/04/25)

Important notices

- Today's lecture is the last one.
  Thank you for joining the class. I appreciate your feedback and comments which will be useful for my future lectures.

- Please fill the form "Course Survey" on LMS.

Q and A

Q: Why does the fact that the light-like line $\gamma(s) = -\boldsymbol{x} + s\boldsymbol{v}$ is invariant under Lorentz transformation, that is, invariant under different observers, represent the principle of light speed invariance? I don't understand the relationship between $\gamma(s)$ and the speed of light.

Q and A

Q: Does the hyperbolic space have a physical interpretation to it? As I understand it is a subspace of the Lorentz-Minkowski space where all vectors are time-like of a particular kind ($\langle \boldsymbol{x}, \boldsymbol{x} \rangle = -1$.