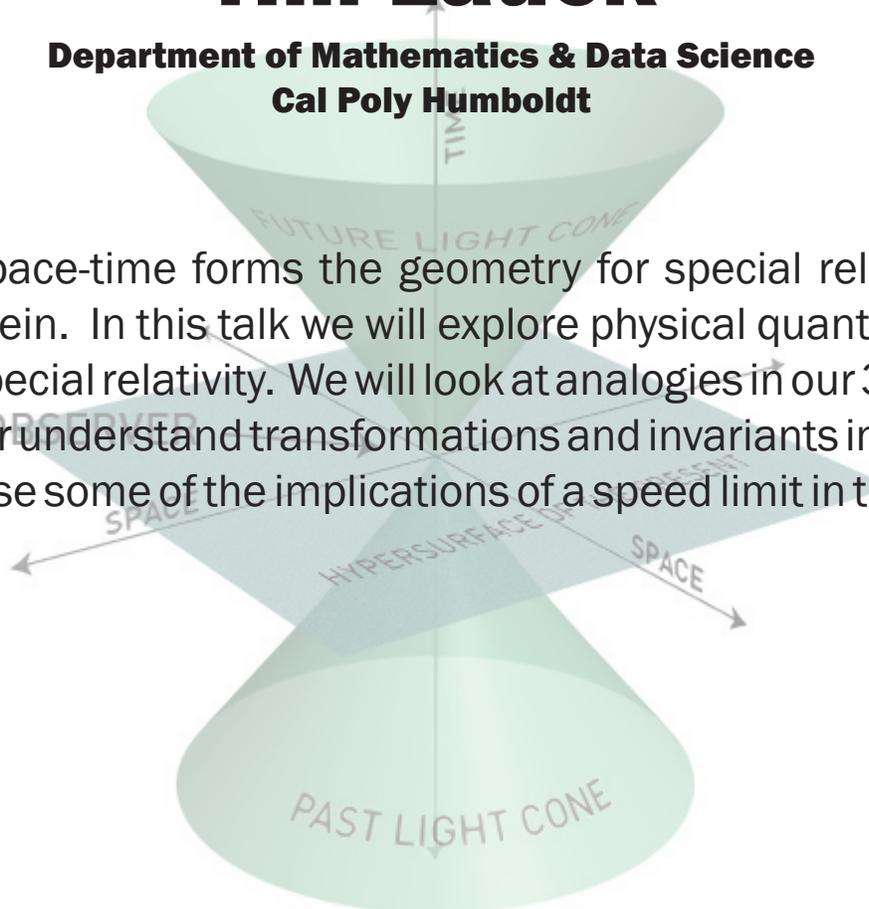


# “Observer” Invariants in Minkowski Space-Time

## Tim Lauck

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Minkowski space-time forms the geometry for special relativity developed by Einstein. In this talk we will explore physical quantities that are invariant in special relativity. We will look at analogies in our 3D perceived world to better understand transformations and invariants in space-time. Can we glimpse some of the implications of a speed limit in the universe?



**THURSDAY**  
**Feb. 5, 2026**

**4:00 PM**  
**BSS302**

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**FOR MORE INFO GO TO <https://math.humboldt.edu/get-involved/mathematics-colloquium>**

**We cordially invite you to the PRE-COLLOQUIUM TEA in BSS#312**  
**at 3:30 PM**