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A Mathematical Model to Derive the Lorentz Factor, Zero Velocity, and Length Contractions (Finding a Privileged Reference Point)

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— This presentation uses Einsteinian concepts to derive the Lorentz factor, intersects observers A and B along a single axis to define a zero point, and uses the zero point to derive the Lorentz factor and understand length contractions. This zero point, as well as any other zero point, can be used by observer A to find A's velocity. The zero point mathematical model demonstrates that A finds that light only travels the hypotenuse distance and that, except at zero velocity, light does not travel the perpendicular distance. Finding a zero point defines a privileged reference point.

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