

# Special Relativity from a Mathematician's Point of View

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This will be a gentle introduction to special relativity, from the mathematician's point of view. So we shall understand special relativity as a geometry, that is, as a mathematical space together with a group of transformations acting on that space.

1. [1A](#) [1B](#)
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The content covers the following topics:

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|-------------------------------------|--|
| 1. Principles of special relativity | 4. The metric, and causality                           |
| 2. The Lorentz group                | 5. Aberration  |
| 3. Effects in space and time        | 6. The celestial sphere, and $\text{SL}(2,\mathbb{C})$ |

July 26, 2025