Making Special Relativity as Simple as Possible (But No Simpler than That)

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I shall describe some notions about how special relativity ought to be taught, that evolved in courses for nonscientists (and occasionally scientists) over the past forty years: first teach your students how to solve simple nonrelativistic collision problems by changing frames of reference, using nonrelativistic addition of parallel velocities; extract the relativistic parallel velocity addition law from a simple thought experiment immediately after discussing the constancy of the velocity of light; lose no opportunity to remind students of the frame-dependence of simultaneity; be firm about the fact that moving sticks really do shrink and moving clocks really do run slowly; unless you’re training professionals, skip the Lorentz transformation; do teach Minkowski diagrams, treating them as an exercise in elementary spacetime mapmaking.