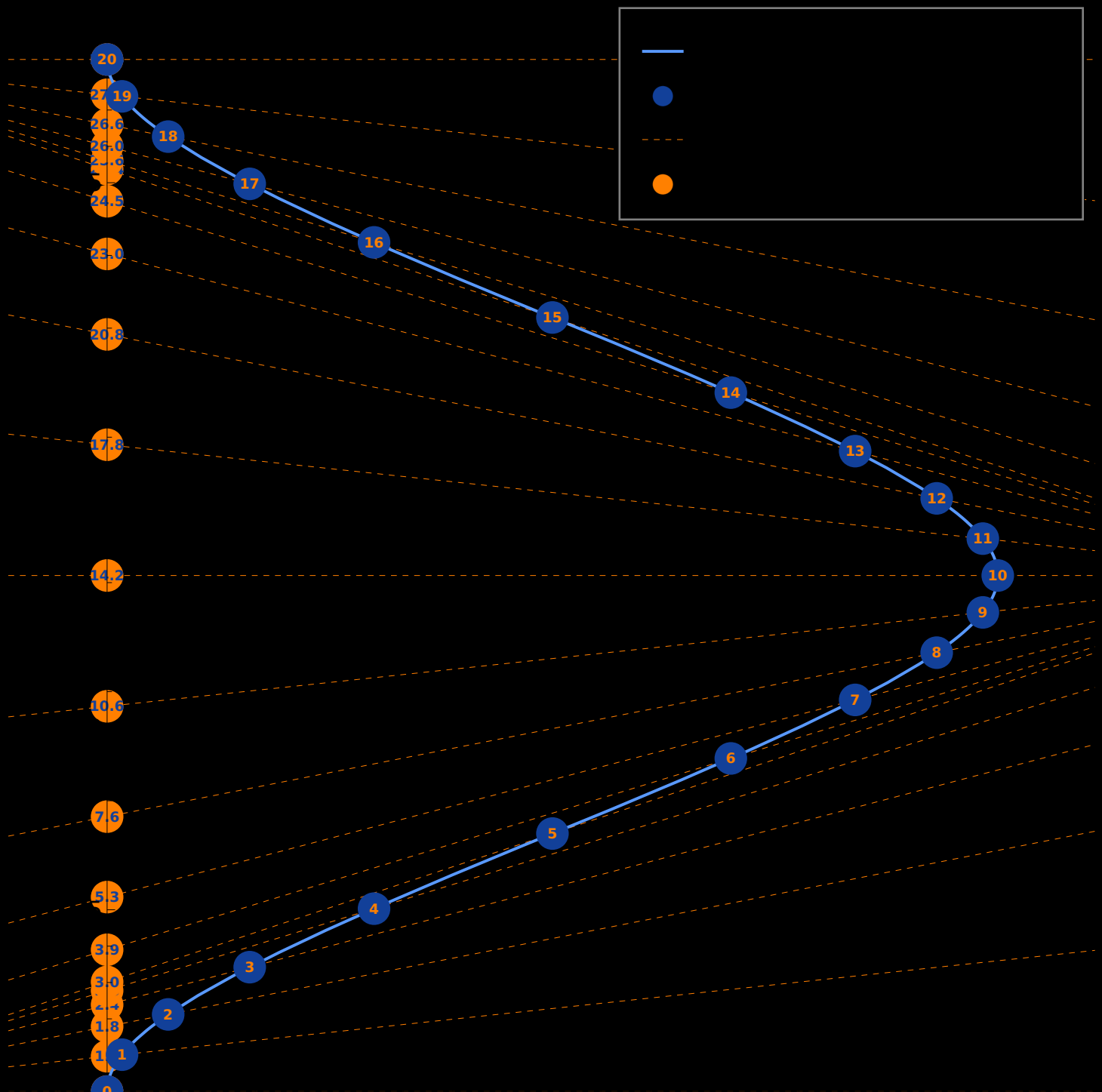# The Twin (Quasi)Paradox



Traveler's proper time $\tau$ (their clock) vs stay–at–home inertial time t.

Trajectory: accelerate out, flip, then return while decelerating/accelerating.

$0 \leq \tau < 5$ yr: $+0.3$ ly/year$^2$ ($\approx 0.29$ g)

$5 \leq \tau < 15$ yr: $-0.3$ ly/year$^2$ ($\approx -0.29$ g)

$15 \leq \tau < 20$ yr: $+0.3$ ly/year$^2$ ($\approx 0.29$ g)

After 20 years of the traveller's proper time, the twins are reunited and in the same reference frame.

The stay–at–home twin has aged by 28.39 years, and is 8.39 years older.

Caveat: this "inferred" stay–at–home age while away depends on the traveler's notion of simultaneity.

Relativity has no global now, only local here–and–now.