

I-132

A 140 kg astronaut is standing on the extreme edge of a 1000 kg space platform, at rest relative to the mother ship. She walks at a constant speed of 2.0 m/s, relative to the mother ship, toward the other edge of the platform. (She wears special magnetic shoes that allow her to walk along the metal platform.) As she walks, the platform moves through space.

Free-Body Diagrams

Mathematical Analysis

astronaut

platform

Event 1:

Event 2:



This page titled [I-132](#) is shared under a [CC BY-NC-SA 4.0](#) license and was authored, remixed, and/or curated by [Paul D'Alessandris](#) via [source content](#) that was edited to the style and standards of the LibreTexts platform.