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# The Development of Interstellar Meteoroid Streams

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## The Development of Interstellar Meteoroid Streams

A vast distance separates our Sun from the stars, yet their system's material does sometimes appear in our own Solar System. The work of my PhD is to help answer the question: where is it coming from and how is it delivered? The details of this interstellar material's travels throughout the Galaxy are unknown but have wide-ranging implications. This material could seed the formation of planets in newly forming planetary systems, while also dispersing chemical elements, organic molecules, or even life between nearby star systems. The first two interstellar objects discovered have been recent, 1I/'Oumuamua and 2I/Borisov, the first a rocky body, the second an icy one: these very different compositions highlight the mystery of their origin. My research simulates stellar systems ejecting material within the Milky Way. I analyze the motion of the ejecta as the material evolves in time and examine the development of the galactic "meteoroid streams."

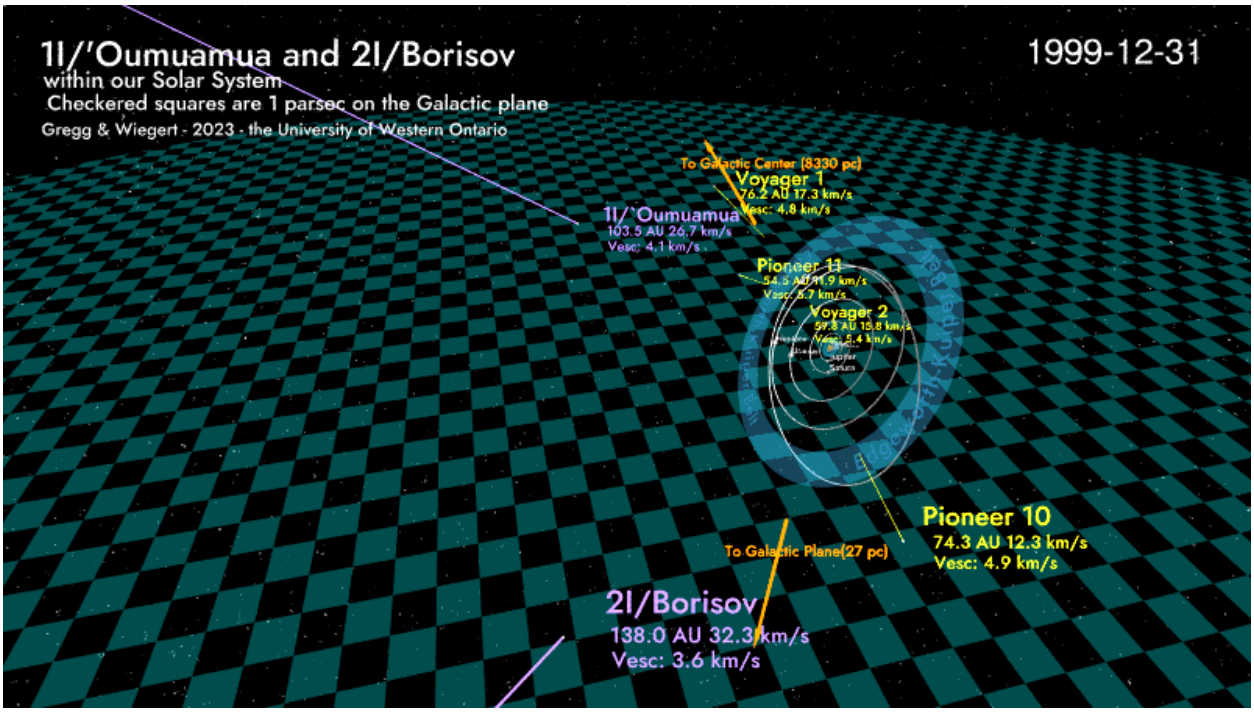


*Figure 1:* 1I/'Oumuamua and 2I/Borisov approaching the Solar System.

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