P4: Identification of substructure in large stellar surveys
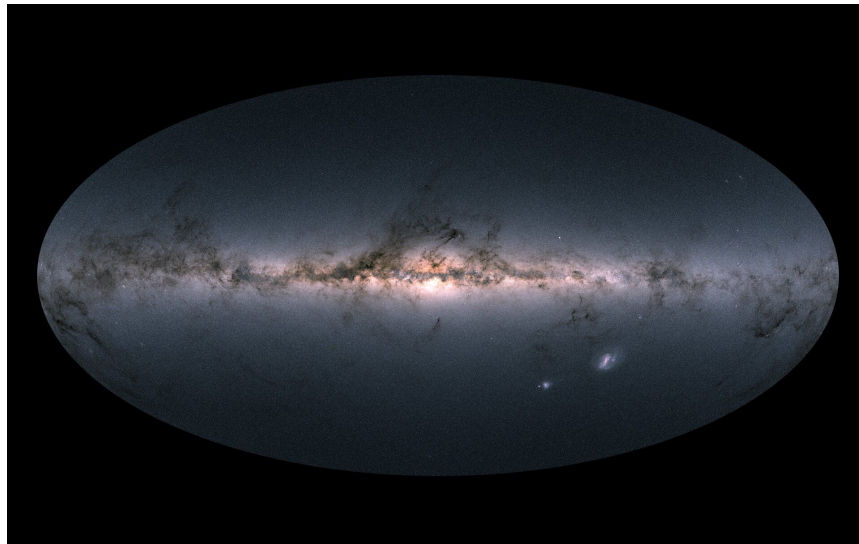
Background
Large surveys of the sky such as SDSS, DES, Gaia have revolutionized the field of galactic archaeology and our understanding of the Milky Way and its neibghbors. One of the most exciting results from this was the discoverProject goal
y of large number of previously unknown dwarf galaxies and stellar streams

Project goal
The goal of the project is to take a subset of Gaia data and detect the substuctures in position and position-velocity space using density estimation and orbital modeling techniques.

Necessary concepts
Milky Way, magnitudes, colors, proper motions

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