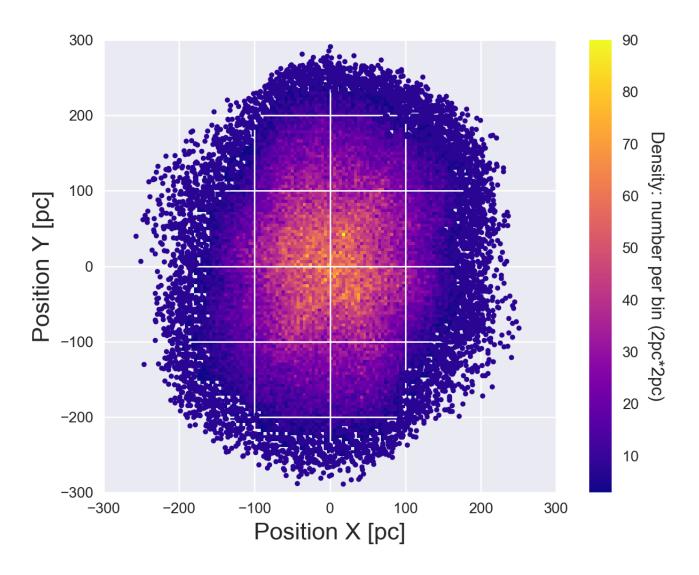
## **Gaia Project**

## **Objectives**

Analyze Gaia first data release, test astronomical theories using astrometric and kinematic properties of stars in the Milky Way.

## How to proceed:

- 1. Study the content of Gaia data release, identify the data sets and parameters necessary for this analysis, import data.
- 2. Select data based on resolution, calculate positions, proper motions, etc. Plot 3-D maps of stars' density distribution, velocity distribution, etc.
- 3. Find patterns for the plots. Fit functions or local interpolations.
- 4. Examine these patterns based on available models.



Density distribution is higher near center.

However, it might be caused by resolution.

I'd like to transform the coordinates into the center of the Milky Way for calculation.