

## X57a Exploring the origin of the mysterious stellar stream "Leiptr" with Galactic Archaeology

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In the stellar halo of the Milky Way, more than 100 stellar streamers, which are left behind by orbiting dwarf satellite galaxies and globular clusters, have been found (Mateu 2023). The Leiptr stream is considered a candidate object from another galaxy's disrupted globular cluster (Ibata, et al. 2019, Bonaca, et al. 2021). However, this result consists of dynamical data from photometric observations, and high-dispersion spectroscopic data for this star are not available; to prove the origin of the Leiptr stream, data on its chemical composition are also needed. We observed one target in the Leiptr stream with the Subaru Telescope HDS. According to our result, one star belonging to the Leiptr stream has a typical feature of stars in UFD. On the other hand, a typical feature of stars belonging to globular clusters, is also seen in the same star. Since the line of sight velocities and chemical compositions of other stars have not been observed, it is not confirmed whether this stream originates from a UFD or a globular cluster. Although globular clusters and dwarf galaxies are thought to be distinctly different, the star in the Leiptr stream has both characteristics. In other words, the Leiptr stream may have originated from an unknown system that bridges the two. In this presentation we will discuss these results. In addition, the results of the analysis using metallicity data from the "Pristine survey" (photometric observations) will also be discussed.