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KINEMATICAL SIGNATURE OF DWARF GALAXY TIDAL DISRUPTION

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We can observe stellar structures in a halo of the Milky Way and M31 galaxy (host galaxy). Some of these structures are formed in merger events with dwarf satellite galaxies. With observed velocities in these structures, we can probe different N-body models of dwarf galaxies and run simulations of merger events. In some cases, we can detect the remnant of the dwarf, but sometimes it seems fully disrupted, or it is in the region of the disk, and it is impossible to detect with available resolution. In this work, we investigated the kinematical properties of faint stellar structures and differences in properties of the host galaxy after the merger event. When we cannot detect the remnant of the dwarf, we can find a kinematical trace of the remnant in the kinematical picture of the host.