FLUX ROPES IN THE HELIOSPHERE

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Solar coronal mass ejections and their interplanetary counterparts often show evidence of a twisted flux rope structure that is nearly identical, though of vastly different spatial scale, to plasmoids observed in the Earth's magnetotail. This talk will review the current understanding of flux rope formation, morphology, and evolution in coronal mass ejections and magnetotail plasmoids. This talk will highlights the idea that flux rope formation is a common space physics phenomenon and that the physical mechanisms responsible for flux rope formation occur over a wide range of plasma conditions wherever current sheets exist.

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