



A cusp-shaped jet observed by IRIS and SDO

Yuzong Zhang and Jun Zhang

National Astronomical Observatories, Chinese Academy of Sciences, China (yuzong@nao.cas.cn)

On 2014 August 29, the trigger and evolution of a cusp-shaped jet were captured in detail at 1330 \AA by the Interface Region Imaging Spectrograph. At first, two neighboring mini-prominences arose in turn from the low solar atmosphere and collided with a loop-like system over them. The collisions between the loop-like system and the mini-prominences lead to the blowout, and then a cusp-shaped jet formed with a spire and an arch-base. In the spire, many brightening blobs originating from the junction between the spire and the arch-base moved upward in a rotating manner and then in a straight line in the late phase of the jet. In the arch-base, dark and bright material simultaneously tracked in a fan-like structure, and the majority of the material moved along the fan's threads. At the later phase of the jet's evolution, bidirectional flows emptied the arch-base, while downflows emptied the spire, thus making the jet entirely vanish. The extremely detailed observations in this study shed new light on how magnetic reconnection alters the inner topological structure of a jet and provides a beneficial complement for understanding current jet models.