The Fundamental Structure of Coronal Loops

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During the past ten years, solar physicists have attempted to infer the coronal heating mechanism by comparing observations of coronal loops with hydrodynamic model predictions. These comparisons often used the addition of sub-resolution strands to explain the observed loop properties. On July 11, 2012, the High Resolution Coronal Imager (Hi-C) was launched on a sounding rocket. This instrument obtained images of the solar corona was 0.2-0.3" resolution in a narrowband EUV filter centered around 193 Angstroms. In this talk, we will compare these high resolution images to simultaneous density measurements obtained with the Extreme Ultraviolet Imaging Spectrograph (EIS) on Hinode to determine whether the structures observed with Hi-C are resolved.