

THE INTERNAL MAGNETIC STRUCTURE OF SOLAR CORONAL LOOPS

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Coronal loops have been observed with a number of instruments on a number of space craft. In spite of increased spatial resolution, there has so far not been observed loops that have measured more than a few pixels in diameter and therefore largely unresolved. That leaves us with little observational help in determining the internal structure of loops. Understanding the internal structure of loops could answer a number of very intriguing questions. Among them why coronal loops do not get appreciatively wider with height, how waves are damped when traveling in them and how the dynamics are affected by the internal structure. In a number of test cases we have investigated how flux tubes between two driving surfaces behave through time, and how the internal structure varies with driving type. The results from these simplified models will be shown and discussed.