

**ON THE PROPERTIES OF
MAGNETOHYDRODYNAMIC WAVES IN CURVED
CORONAL FIELDS**

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The main aim of this work is to study the combined effect of the magnetic field curvature and line-tying of the properties of magnetohydrodynamic waves in the solar corona. The time-dependent problem of the propagation of the three types of waves, fast, slow and Alfvén, is investigated using a simple potential coronal arcade model. We show the details of the propagation of these waves, and how standing slow and Alfvén waves are eventually formed in the curved configuration. The effect of the coupling between the three waves due to the geometry is also analysed.