

Abstract Submitted  
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**Displaying polarization fields with line integral convolution**

DAVID LARSON, Johns Hopkins — The method of line integral convolution, introduced by Cabral and Leedom in 1993, can be very useful for displaying polarization fields. The method creates a texture which is aligned with the direction of the polarization. When using it to view polarization on the sphere, such as with the Cosmic Microwave Background (CMB), this method creates a smooth texture which: represents both magnitude and direction of the polarization field, can be easier to interpret than discrete-lines-on-a-grid, can be correctly projected as easily as CMB temperature data, and can easily be overlaid on CMB temperature data. This method has been implemented as part of the Healpix code.

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