

ABSTRACT ONLY

FINDING FILAMENTARY STRUCTURES ON SUN'S CHROMOSPHERE

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Since 1960, Sun's chromosphere has been an interesting topic on physics research. As we get stunning images from our Sun we need to find out a way to analyze them. We have been working on an algorithm previously developed by Professor Forero in order to use it on finding filamentary structures on Sun's chromosphere in an autonomous ways. Using eigenvalues and second-order derivatives we were able to follow filamentary structures on an image provided by Big Bear Solar Observatory. Our next step is to use simulations of Sun's chromosphere to do some test on the algorithm as we improve it, also, we will test it with more images from Sun's chromosphere. This automatic system could help on understanding Sun's chromosphere and it's relationship with solar magnetic field.

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