

Abstract Submitted
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EIT amplitude noise spectroscopy BENJAMIN WHITENACK, DEVAN TORMEY, SHANNON O'LEARY, Dept. of Physics, Lewis and Clark College, MICHAEL CRESCIMANNO, Dept. of Physics and Astron., Youngstown State University — EIT Noise spectroscopy is usually studied by computing a correlation statistic based on temporal intensity variations of the two (circular polarization) propagation eigenstates. Studying the intensity noise correlations that result from amplitude mixing that we perform before and after the cell allows us to recast it in terms of the underlying amplitude noise. This leads to new tests of the quantum optics theory model and suggests an approach to the use of noise spectroscopy for vector magnetometry.

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