

Abstract Submitted  
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**Spectral analysis of dynamic scattering mode in nematic liquid crystals** JAMES GLEESON, MANSOUREH SHASTI, Kent State University — Dynamic Scattering Mode (DSM) is a switchable, optically cloudy state that has various applications. We study this effect as a means to develop an ultimate application: switchable eyewear to control the transmission of the light. Since our eyes are sensitive to a specific frequency range, we measure the Fourier transform of the signal. Also, calculating the auto-correlation signal gives us this ability to predict the signal in time and see how the scattered signal is correlated in time.

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