

Abstract Submitted
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Infrasonic Influence of Volcanos¹ ASHLEY HOSMAN, Hendrix College — My presentation will consist of a poster on the use of ring laser interferometers to detect infrasound. The research was performed during the summer of 2013 and it focused on the finding infrasound emissions created by volcanic activity. I will explain how a ring laser works and discuss how I analyze the collected data using Fast Fourier Transforms. Due to the extreme distances over which infrasound can travel, I will also stress the need to compare the detected responses to specific volcanic eruptions. Finally, I will purpose practical applications of my research. One of the more promising applications is to use ring lasers to detect volcanic activity in remote areas such as parts of the Aleutian Islands. There is considerable air traffic over the Aleutian Islands. Volcanic plumes are a significant aviation hazard and can damage jet engines to the extent that they will no longer operate.

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