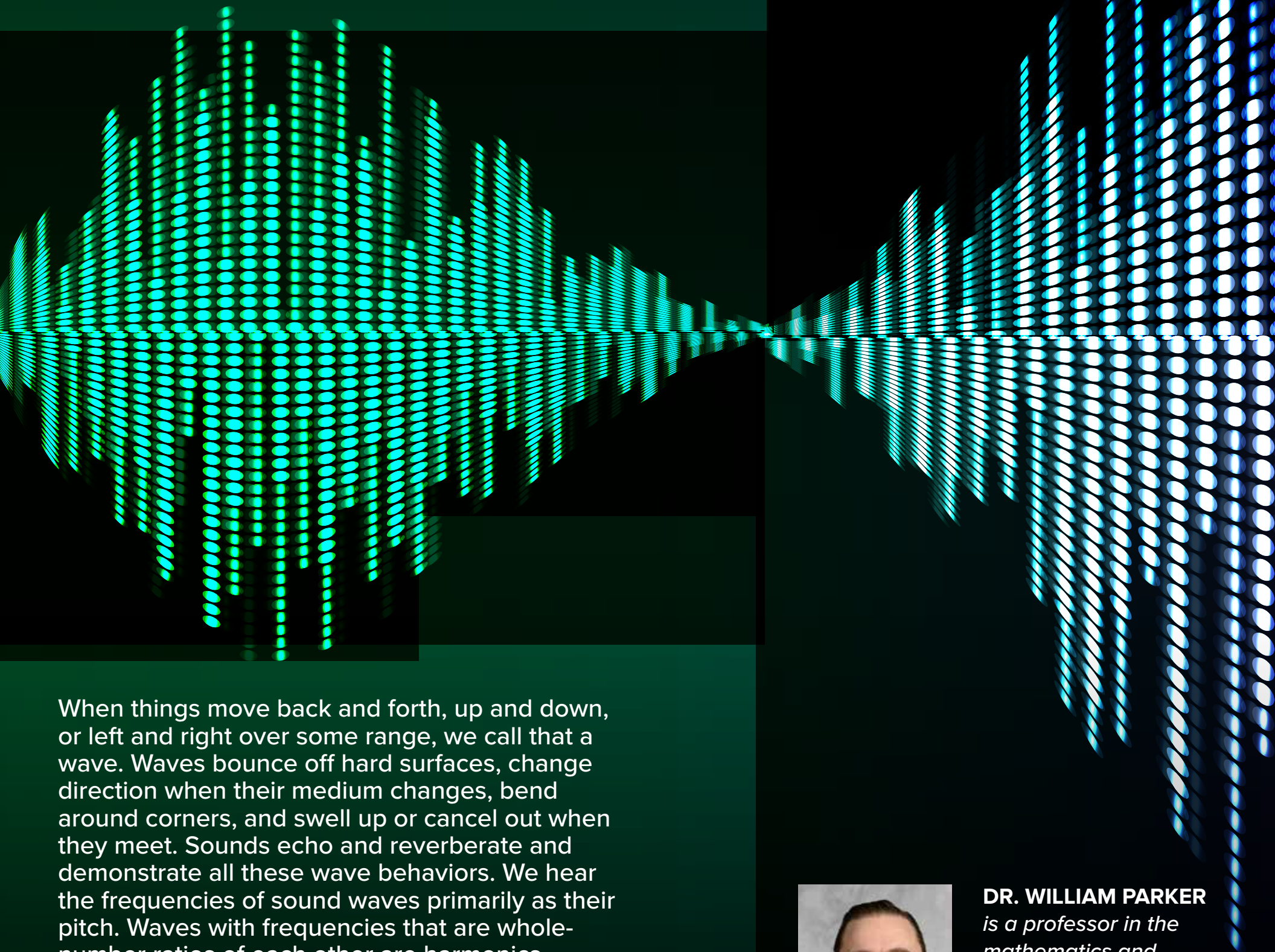


THE COLLEGE OF NATURAL AND HEALTH SCIENCES SEMINAR SERIES PRESENTS

# SCIENCE NIGHT

WEDNESDAY, FEBRUARY 8, 2017 | 7-8 PM | GREENQUIST HALL 103

## WAVES MAKE HARMONIES



When things move back and forth, up and down, or left and right over some range, we call that a wave. Waves bounce off hard surfaces, change direction when their medium changes, bend around corners, and swell up or cancel out when they meet. Sounds echo and reverberate and demonstrate all these wave behaviors. We hear the frequencies of sound waves primarily as their pitch. Waves with frequencies that are whole-number ratios of each other are harmonics. When pitches sound in these ratios, we hear the combination as a harmony. The structured changing of harmonies helps make the emotional experience of music.



**DR. WILLIAM PARKER**  
*is a professor in the  
mathematics and  
physics department at  
UW-Parkside and an  
assistant professor of  
computational physics.*

Free parking after 6:30 pm - Everyone is invited - Refreshments provided

**Be. Real. Amazing.**

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