Abstract Submitted for the CUWIP21 Meeting of The American Physical Society

The Functions and Applications of Low Frequency Oscillators ABIGAIL DRAYER, Manhattan College — In my presentation I will focus on Low Frequency Oscillators (LFO) and LFO modulation. I will explore what LFO modulation is and how it affects the sound of whatever wave it is imposed onto, as well as exploring the effect this sound has on the listener. The frequency of an LFO is lower than the audible range that humans can hear, so what does an LFO sound like in conjunction with an audible oscillator? In what context would one want to apply the sound it creates? While on their own, LFO's cannot be detected by the human ear, though the low frequency sound waves they produce can be physically felt by the listener. The applications of LFO's are vast, spanning several applications and uses such as film scores, noise cancelling headphones, and Long Rang Acoustic Devices

(LRADs).

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