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High Resolution Speech Directivity of Live Subjects¹ CLAIRE PINCOCK, Current, JOSHUA BODON, graduated, JENNY WHITING, Current — The directivity of human speech is something that has been often studied. This kind of data is useful for understanding the spectral difference between placing a microphone in one location or another when recording speech. It also can help improve speech privacy, speech synthesis, and classroom setups. Due to the expense of high-quality microphones, the three-dimensional radiation data is often taken with only 32 points of data or less. 32 points of data isn't enough to properly understand the radiation pattern. Many students and professors at Brigham Young University have developed a higher resolution system which provides 2522 points of data, allowing for a clearer understanding of the radiation of speech around a head. The main focus of this project is to provide talker sources for room acoustics simulation packages so that simulations of speech in those packages will be more accurate. This presentation discusses the methods of measuring and processing that data and the final directivity patterns of multiple male and female subjects.

¹National Institutes of Health

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