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Improved TPB-coated Light Guides for Liquid Argon TPC Light Detection Systems ZANDER MOSS¹, Massachusetts Institute of Technology — This talk will discuss the outcome of recent research and development of wavelengthshifting lightguides for LArTPCs. The response of the lightguides was characterized in both air and liquid argon. Attenuation lengths over 100cm were consistently measured in air, which is an important step in the development of meter-scale lightguides for future LArTPCs. Additionally, good agreement was found between simulations and measurements performed in air and liquid argon. Such agreement indicates that characterization in air is sufficient for quality control of lightguide production.

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