



Hamilton Institute

Linguistic Scene Analysis and the Importance of Synergy

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Abstract

Why do the Articulation Index (AI) and Spectral Temporal Index (STI) often fail to predict how well a listener understands spoken material? This talk explores the possibility that speech is decoded using cross-spectral and cross-modal integration strategies that are inherently synergistic. Combining information from separate spectral channels or across modalities often results in far greater intelligibility and phonetic recognition than predicted by linear integration. This is because decoding speech relies on multi-tier processing strategies that are both opportunistic and idiosyncratic. Models incorporating synergistic integration are more likely to predict linguistic comprehension than conventional, linear approaches, particularly in challenging listening conditions.

Venue: Seminar Room, Hamilton Institute, Rye Hall,
NUI Maynooth

Time: 2.00 - 3.00pm (followed by tea/coffee)

Travel directions are available at www.hamilton.ie



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