**In this Issue Statement**

This study extracted principal gradients from resting-state brain connectivity of healthy controls and participants with Schizophrenia Spectrum Disorders (SSDs) to characterize their functional network organization and examine its multivariate association with social and non-social cognition. The clinical relevance of such brain-behavior relationships was then examined by their correlations to clinical and functioning outcomes of participants with SSDs. Our results showed that the SSDs group featured less network segregation along the unimodal-multimodal, the visual-sensorimotor, and the default-frontoparietal gradients. Such segregations were associated with social and non-social cognition, and these associations were found clinically meaningful, illuminating potential prognostic markers associated with SSDs.