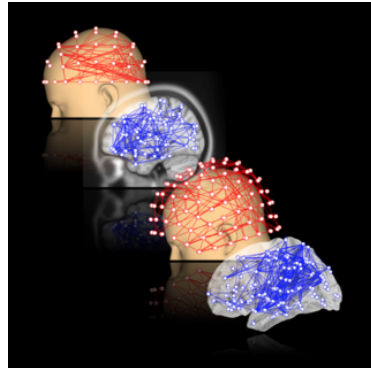


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Filtering information in brain networks



Complex brain networks are mainly estimated from empirical measurements. As a result, filtering procedures are typically adopted to prune the weakest connections. The structural properties of the thresholded networks depend on the number of remaining links and how to objectively fix such threshold is still an open issue. We propose a possible criterion to filter connectivity based on the optimization of fundamental properties in complex systems, such as efficiency and economy, and we show that a general law can be derived. Given its generality, ECO can advance the ability to analyze biological networks inferred from experimentally obtained data. De Vico Fallani et al.

Image Credit: Fabrizio De Vico Fallani

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