



**TIFR Alumni Association**  
**National Science Day Lecture 2022**  
**Brain circuits and computations underlying cognition:**  
**how the brain gives rise to the mind**



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The human brain has 80 billion neurons, or specialized electrically-active brain cells, and an equal number of other cells organized into circuits and systems that process information and give rise to cognition. Brain architectures, especially those of the cerebral cortex, are created during development but are also continuously shaped by plasticity and learning. Flexible reconfigurable networks are essential for dynamics of brain activity underlying cognition. Understanding the underlying computational principles is fundamental for understanding how the brain gives rise to the mind, and ultimately for mechanism-based treatment of brain disorders.

**February 28, 2022 at 6.30 PM IST**

**Zoom: <https://tinyurl.com/MrigankaSur>. YouTube: <https://tinyurl.com/2p8d3m42>**

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