

Network Science: Decoding the Architecture of Complexity

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Abstract: Over the last two decades, network science has illuminated the intricate architectures underlying a spectrum of real-world systems, ranging from cellular networks to social and communication systems. The field has uncovered universal principles that oversee the emergence and evolution of a wide range of real networks. The insights and tools derived have become foundational in various domains, notably in controlling epidemics like COVID and advancing medical diagnostics. In this talk, I will explore the distinctive characteristics and behaviors exhibited by real networks. Our journey will unveil the patterns that extend beyond the individual networks, unveiling universal principles that profoundly influence our lives and the surrounding world.