



**HAGLER INSTITUTE**  
FOR ADVANCED STUDY  
*at Texas A&M University*

**FROM CLOCKS  
TO CLOUDS:**

# **HOW SCIENTIFIC REVOLUTIONS RESHAPED REALITY AND OUR PLACE WITHIN IT.**

**ABSTRACT** For three centuries, Western thought operated under Newton's clockwork paradigm—a universe of perfect predictability and ultimate control through complete understanding. This worldview shaped everything from Madison's checks and balances to Taylor's scientific management, powering the Enlightenment and Industrial Revolution while defining modernity itself.

But successive scientific revolutions shattered that certainty. Statistical thermodynamics, quantum mechanics, relativity, evolution, game theory, DNA, and AI revealed a radically different reality: dynamic, probabilistic, and irreducibly complex. We've moved from Newton's clockwork cosmos to what Karl Popper called a "cloud world"—defined by emergence, uncertainty, and interdependence.

This talk traces how these revolutions transformed not just physics, but our fundamental understanding of reality itself. More crucially, it explores the practical implications of "cloud-thinking" for leadership, organizational design, and navigating 21st-century challenges—where embracing complexity, fostering resilience, and working with systems' inherent dynamics becomes essential for addressing our most pressing problems.



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Engineering, Texas A&M University

**TUESDAY, DECEMBER 9, 2025**  
**4:00 P.M.**

## **Forum Room**

Rudder Tower Complex  
401 Joe Roult Blvd,  
College Station, TX 77840

**\*\*Reception will be immediately following\*\***



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