

KCETA Colloquium

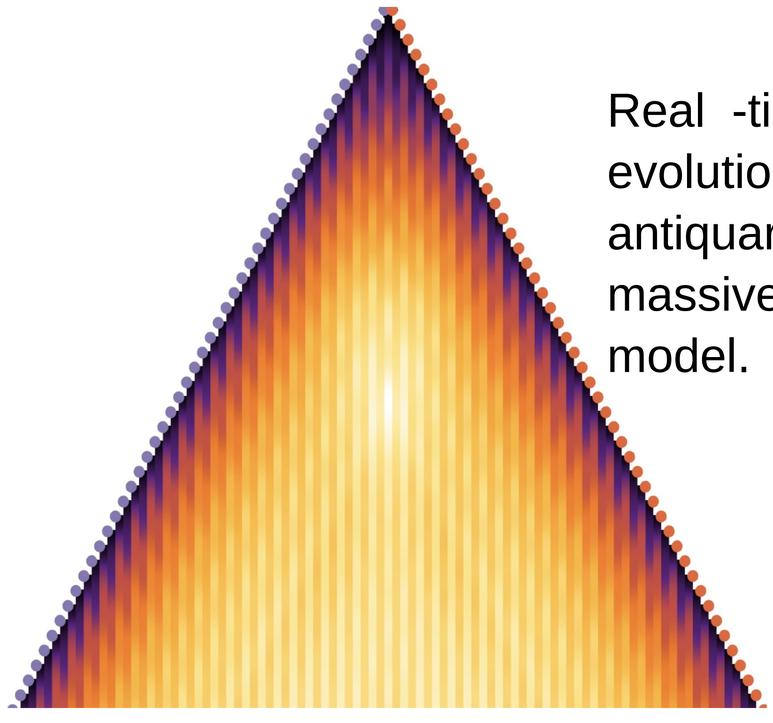
Strongly Interacting Dynamics and their Quantum Origin

Thursday, November 05, 2026
Kleiner Hörsaal A (CS) 15:45 - 17:00

Dr. Adrien Florio
(Bielefeld University)

Despite their remarkable success in describing the universe, cracks are appearing in both the standard model of particle physics and the standard model of cosmology. These discrepancies not only hint at the presence of physics beyond these standard models but also highlight the necessity of understanding them more thoroughly. This need is especially pronounced in the context of dynamics crucial to cosmology and heavy-ion or collider physics.

In this talk, I will discuss progress spanning anomalous transport and axion dynamics, thermalization in first-principle simulations of 1+1 dimensional quantum dynamics, and how concepts from quantum information theory can provide novel perspectives on the phase structure of quantum field theories.



Real -time quantum evolution of a quark antiquark pair in the massive Schwinger model.

Please note:
The colloquium will also be live-streamed to B402 SR224 (CN).

KIT Center Elementary Particle and Astroparticle Physics (KCETA)
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