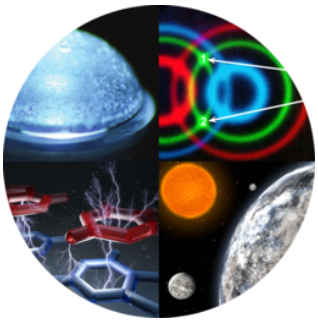

Münchner Physik-Kolloquium

Sommer 2019

Introduction to influence theory: from foundational physics to a new approach to unification

Prof. Dr. Kevin Knuth, *State University of New York at Albany, New York, USA*

Monday, 1 July 2019, 17:15 h
Hörsaal H 030, Fakultät für Physik der LMU, Schellingstraße 4, München

Influence theory is a foundational theory of physics that is not based on traditional empirically defined concepts, such as positions in space and time, mass, energy, or momentum. The aim is to derive these concepts from a more primitive, foundational, model. It is postulated that there exist things, which we call particles, that influence one another in a discrete and directed fashion resulting in a partially ordered set of influence events. Observers aim to consistently quantify the universe of events in which they themselves are embedded. Consistent quantification of events results in a unique mathematical framework for quantifying events that is consistent with special relativistic space-time. At microscopic scales inferences about influence events result in relativistic quantum mechanics. I develop the kinematics and dynamics of classical particles from the perspective of influence theory and demonstrate a novel perspective on unification.

Student event: Meet the speaker

*We invite you to a **student-only** discussion-round with Prof. Dr. Kevin Knuth before his Munich Physics Colloquium talk.*

Be curious and feel free to ask any question.

Monday, 1 July 2019, 16:00 h,
Room H 522 (5th floor), Fakultät für Physik der LMU, Schellingstraße 4, München