

FAKULTÄT für PHYSIK
LUDWIG-MAXIMILIANS-UNIVERSITÄT
MÜNCHEN/GARCHING

PHYSIK-DEPARTMENT
TECHNISCHE UNIVERSITÄT MÜNCHEN
MÜNCHEN/GARCHING

MLL-KOLLOQUIUM

Donnerstag, 18.10.2018, 16¹⁵ Uhr

Hörsaal der LMU in Garching, Am Coulombwall 1
Treffen zum gemeinsamen Kaffee 16 Uhr

Prof. Detlef Dürr

(Mathematisches Institut, LMU München)

What is and to which end does one study Bohmian Mechanics ?

When Schrödinger found his famous equation, the meaning of the wave function as generator for the motion of particles was almost immediately suggested by Louis de Broglie. His suggestion was immediately pushed aside by various reasonable and unreasonable objections. De Broglie's suggestion was independently rediscovered and worked out in 1952 by David Bohm and popularised by John Steward Bell. It is nowadays accepted as alternative quantum theory, but for a paradigm change physicists would like to see 'new predictions', much as it was the case for Boltzmann's atomism and Brownian motion. I shall introduce Bohmian mechanics, I shall comment on the history of its non acceptance and I shall report on a recent result by Siddhant Das for arrival time distributions in quantum mechanics, which may provide the elements for a paradigm change to a quantum world which is understandable.

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