

# Seminarium Zakładu Fizyki Teoretycznej

Departament Badań Podstawowych  
Narodowego Centrum Badań Jądrowych

May 12, 2021 (Wednesday), h. 14:00

The seminar is held online:

[https://www.gotomeet.me/NCBJmeetings/bp2\\_seminar](https://www.gotomeet.me/NCBJmeetings/bp2_seminar)

**Nelson Pinto-Neto**

( CBPF, Rio de Janeiro )

## "The de Broglie--Bohm Approach to Quantum Cosmology"

**ABSTRACT:** We review the de Broglie--Bohm quantum theory, an alternative description of quantum phenomena in accordance with all the quantum experiments already performed. It is a dynamical theory about objectively real trajectories in the configuration space of the physical system under investigation, where probabilities of outcomes are not essential. Hence, it can be applied to single closed systems, being suitable for Cosmology. The emerging cosmological models are usually free of singularities, with a bounce connecting a contracting era with an expanding phase, which we are now observing. Such models can be successfully confronted with current observations, and can complement inflation, or even be an alternative to it. **Please note the change of time.**

*Best regards,*

*T. Altinoluk, M. Kowal, P. Małkiewicz, E. Sessolo, P. Zin*