THEORY LECTURES SERIES: An Introduction to Quantum Metaphysics

HIPPOLYTE DOURDENT

October 03, 2023 to October 31, 2023
10:00 to 12:00
Blue Lecture Room, Seminar Room and online (Zoom)

Quantum theory is i¿½strangei¿½. While physics usually aims to describe the world an
to dissolve its strangeness, or at least to familiarize ourselves with it, quantum theory s
ems desperately silent when it comes to extract meaning from its equations, even though
its mathematical grounds have been fixed almost a century ago. As pointed out by D
vid Mermin, i¿½Quantum theory is the most useful and powerful theory physicists hav
ever devised. Yet today, [...] disagreement about the meaning of the theory is stronger than
ever. New interpretations appear every day. None ever disappear.i¿½ This never endin
set of interpretations is often referred to as i¿½a map of madnessi¿½, and is the p
ayground of quantum metaphysics - what comes after/beyond quantum theory. This series of
lectures on quantum foundations aims to provide you with an up-to-date exploration of th
s sprawling i¿½mapi¿½, introducing pivotal no-go theorems (Bell, Kochen-Spe
ker, PBR, Local Friendliness) that delineate its frontiers, as well as equipping you with es
ential tools to navigate through these numerous meta-quantum propositions,
panning from de Broglie-Bohm theory and Everett's many worlds to Relational Quant
m Mechanics and QBism... and beyond. (Prerequisite knowledge : Standard qua
tum mechanics). The lectures will be held in the **BLR** on **October 3, 10**, **31** and in the **SMR** on **October 24** from **10:00** to **12:00.**
Participation is open to all ICFOnians
We strongly encourage you to attend the lectures in person.
In case you are unable to attend in person, please, use the following link:

Meeting ID: 832 6134 5290
Passcode: 480299
Hosted by: Academic Affairs