



NITheP cordially invites you to a seminar by

Professor Elemer Rosinger

Gottfried Wilhelm Leibniz Basic Research Institute & University of Pretoria

Date: Monday, 26th November 2018

Time: 10h00 -11h00

Venue: NITheP Seminar Room, 3rd Floor, H-Block

Title: What If Quantum Theory Violates All Mathematics?

Abstract: It is shown by using a rather elementary argument in Mathematical Logic that $\{ \text{it if} \}$ indeed, quantum theory does violate the famous Bell Inequalities, then quantum theory $\{ \text{it must} \}$ inevitably also violate $\{ \text{it all} \}$ valid mathematical statements, and in particular, such basic algebraic relations like $0 = 0, \sim 1 = 1, \sim 2 = 2, \sim 3 = 3, \dots$ and so on ... $\backslash \backslash$
An interest in that result is due to the following three alternatives which it $\{ \text{it imposes} \}$ upon both Physics and Mathematics : $\backslash \backslash$

- 1) Quantum Theory is inconsistent. $\backslash \backslash$
- 2) Quantum Theory together with Mathematics are inconsistent. $\backslash \backslash$
- 3) Mathematics is inconsistent. $\backslash \backslash$

In this regard one should recall that, up until now, it is $\{ \text{it not} \}$ known whether Mathematics is indeed consistent. $\backslash \backslash$

Coffee & muffins at 11h05