



UNIWERSYTET SZCZECIŃSKI  
INSTYTUT FIZYKI

## Środowe seminarium w Instytucie Fizyki

October 27<sup>th</sup> – 12:00

**Dr. Chiara Marletto**

University of Oxford

*“Witnesses of non-classicality beyond quantum theory”*

The theory of quantum computation has brought us rapid technological developments, together with remarkable improvements in how we understand quantum theory. I will describe the foundations of a programme to extend the quantum theory of computation beyond quantum theory itself, based on the recently proposed constructor theory. I will then explain a recent application of this new approach to the problem of witnessing quantum effects in gravity.