

### Prof. Adan Cabello

University of Sevilla

### **Tutorial lecture:**

# Contextuality, non-locality and graphs

An introduction to quantum contextuality and quantum non-locality, with a discussion on how graphs can help to identify interesting experiments.

Giorno: 19 Dicembre

Aula: 3, ed. Fermi Ora: 12:30-14:00

### Seminar:

## Simple unified proof of state-independent contextuality

For years, the statement that quantum mechanics exhibits state-independent contextuality (SIC) has been based on a mathematical result pointed out by Kochen and Specker (KS) and Bell: the existence of the so-called KS sets. Recently, Yu and Oh have observed that KS sets are not necessary to prove SIC. Here we provides a simple unified characterization of all SIC proofs and discuss the experimental implications of this result.

Giorno: 20 Dicembre

Aula: 8, ed. Fermi Ora: 15:00-16:00

