

The Vienna Doctoral Programme on Complex Quantum Systems  
invites you to a

## Seminar Talk

by

**Sandu Popescu**

*University of Bristol*

***“Exploring the limits of no-backward-in-time signalling”***

One of the most routine observations that we make about our world is that we cannot signal backwards in time. So ubiquitous is this understanding that it is often taken as one of the basic laws of Nature. At first glance, this remark seems straightforward. However, as I will show, in probabilistic theories such as quantum mechanics, the consequences of such an assertion are far more involved. In fact, we will see that there is a surprising amount of liberty: some theories even allow the future to affect the past, nevertheless without signalling backwards in time.

**Monday, 16 December 2019,  
16:30h get-together with coffee and snacks!**

Lise Meitner Hörsaal, Strudlhofgasse 4, 1<sup>st</sup> floor, Vienna

The seminar talk will be preceded by a CoQuS Student talk at 17:00h  
by

**Jaroslav Kysela**

*University of Vienna*

***“Engineering high-dimensional entanglement”***

Hosted by: Caslav Brukner