



The Abdus Salam  
**International Centre  
for Theoretical Physics**



**Conference on Long-Range Interacting Many-Body Systems:  
from Atomic to Astrophysical Scales  
(25 - 29 July 2016)**

**Venue: ICTP Leonardo da Vinci Building - Budinich Lecture Hall**  
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Title:  
**Long-range interactions in cold atomic systems**

Speaker:  
**Igor LESANOVSKY**

Affiliation:  
The University of Nottingham  
School of Physics & Astronomy  
U.K.

In this talk, I will review current developments in the domain of cold atomic physics. I will particularly focus on the role of long-range interactions - how they emerge, how they can be tuned and how they influence the behaviour of engineered many-body quantum systems. This talk will mostly focus on theoretical aspects, but will attempt to connect to the most recent experimental developments.