## Luis Fernández Menchero

Queen's University Belfast Cloudy Summer School, Belfast, 2017 Researcher profile

## **Research background**

- 2000 2005: PhD Universidad Autónoma de Madrid. Ion molecule collisions. Charge exchange, dissociation and vibrational excitation in ion – molecule collisions. Theoretical study of collisions ion – H<sub>2</sub>.
- 2010 2015: Atomic Data and Analysis of Structure (ADAS) project. University of Starthclyde.
  - 2010 2012: Institute of Plasma Physics Garching. Collaboration with experimentalists in ASDEX-Upgrade. Beam modelling, Stark effect.
  - 2013 2015: University of Starthclyde. R-Matrix calculation for atomic processes for fusion and astrophysics.
- Currently: Queen's University Belfast. R-Matrix calculations for atomic processes for fusion and astrophysics.

## **Current research interests**

- Atomic data production: electron-impact excitation and ionization, photoionization, radiative recombination, dielectronic recombination, etc.
- Fundamental atomic physics. Different methods to calculate the data. Accuracy of the calculations. Atomic structure.