



Contribution ID: 107

Type: **Invited Talk**

## **Nuclear structure observables to shed light on neutrinoless double-beta decay**

*Friday, 28 February 2020 11:20 (30 minutes)*

Neutrinoless double-beta decay ( $0\nu\beta\beta$ ) is notoriously difficult to observe. Moreover, expected decay rates depend on the value of the nuclear matrix elements (NMEs) which are poorly known. In order to obtain insights on the NMEs, and therefore on expected decay rates, one can study other processes connected to  $0\nu\beta\beta$  decay. In this talk I confront predictions and measurements of the half-life and beta spectrum of the two-neutrino double-beta decays to test nuclear models used to calculate  $0\nu\beta\beta$  NMEs. In addition, I discuss the relation between  $0\nu\beta\beta$  NMEs (mediated by the weak interaction) and other nuclear observables such as double Gamow-Teller (strong) and double-gamma (electromagnetic) transitions.

**Primary author:** MENENDEZ, Javier (University of Barcelona)

**Presenter:** MENENDEZ, Javier (University of Barcelona)

**Session Classification:** Invited Talks

**Track Classification:** Invited Talk