Contribution ID: **71** Type: **Poster**

DECAY CHAIN OF SUPERHEAVY NUCLEI Z=118-122 AND N~172

We address the current understanding of the nuclear structure of nuclei to evaluate their stability. The microscopic shel model approach and phenomenological models are applied to predict the α halflives for several yet-unaccessible isotopes of superheavy elements Z=118-122. We outline what might be expected for the nuclear stability from studying:i) couplings between the single particle and collective motions; ii) corrections due to finite sizes of nucleons and clusters. The g.s. state-to-g.s. state total halflives indicate a rather stable shell structure at the 292120 nuclide wich is symilar to the spherical shell structures in 2o8P b and 100Sn.

Primary author: Ms ANGHEL, Claudia (IFIN-HH)

Presenter: Ms ANGHEL, Claudia (IFIN-HH)

Session Classification: P2 Nuclear Structure, Spectroscopy, and Dynamics

Track Classification: P2 Nuclear Structure, Spectroscopy, and Dynamics