

Photon strength functions in terms of statistical approach to a nuclear decay describe the probability distribution of photon emission by given nucleus. They can be studied using two step gamma cascades. The two step gamma cascade method was firstly introduced in fifties of the 20<sup>th</sup> century. Our aim is to study two step gamma cascades following thermal neutron capture in <sup>151</sup>Eu. The experiment was performed at the Nuclear Physics Institute ASCR in Řež near Prague. The acquired emission spectra of photons from thermal neutron capture will be processed by energetic and efficiency calibration and after further processing will be compared to the output of theoretical models.