

## Shape phase transitions in atomic nuclei along $Z = 114$ and $Z = 120$ isotopic chains

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Using the constrained Skyrme-Hartree-Fock-Bogoliubov approach we examine the shape phase transitions and critical point phenomena in the even-even superheavy nuclei. The self-consistent Skyrme-HFB model is equivalent to minimization of the total energy of Skyrme energy density functional under constraints of: average values of neutrons/protons numbers  $N_{n/p}$  and values of multiple-moments  $Q_{\lambda\mu}$  [1]. We analyze the evolution of the ground-state shapes on the  $(\beta-\gamma)$  energy maps and the effect of triaxiality on the heights of inner fission barriers in superheavy nuclei along  $Z = 114$  and  $Z = 120$  isotopic chains.

### Bibliography

[1] A. Staszczak, C. Y. Wong, and A. Kosior, Phys. Rev. **C95** (2017) 054315.