

ALGIRDAS DEVEIKIS

Research field: Focuses on the numerical modeling of atomic nuclei using a few body problem approach and heavy atomic nuclei using a geometric model approach. The goal of the research of light nuclei is to gain insights into the structure, properties, and reactions of atomic nuclei with a few body problem perspective, which can have applications in areas such as nuclear structure, nuclear reactions, and nuclear astrophysics. The goal of the research of heavy nuclei with the geometric model is to provide insights into the complex interplay between their geometric structure and properties which have implications in areas such as nuclear structure predictions, nuclear reactions, and nuclear technology development.

Main publications:

Deveikis, A. (2017). New possibilities of harmonic oscillator basis application for calculation of the ground state energy of a Coulomb non-identical three-particle system. *Lithuanian Journal of Physics*, 57(2).

Deveikis, A., Gusev, A., Vinitsky, S., Gózdź, A., Pędrak, A., Burdik, Č., & Pogosyan, G. (2021). Symbolic-Numeric Algorithms for Computing Orthonormal Bases of $SU(3)$ Group for Orbital Angular Momentum. In *Computer Algebra in Scientific Computing: 23rd International Workshop, CASC 2021, Sochi, Russia, September 13–17, 2021, Proceedings 23* (pp. 100-120). Springer International Publishing.