**Computing Atomic Nuclei from First Principles**

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**Abstract**

In this talk I will present recent highlights from ab-initio computations of atomic nuclei using coupled-cluster methods. The recent progress in computing nuclei from scratch is based on methods with a polynomial computational cost together with available super computing resources such as TITAN at OLCF. The physics advancements I will discuss include: (i) accurate nuclear binding energies and radii of light and medium-mass nuclei, (ii) the neutron distribution and electric dipole polarizability of the nucleus 48Ca, and (iii) the structure of the rare nucleus 78Ni from first principles. All these quantities are currently targeted by precision measurements worldwide.