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## Scalable ab initio approaches

Ab initio calculations of atomic nuclei aim at describing their structure and reaction properties starting solely from the basic interactions between nucleons. In the past decade, thanks to developments in many-body theory and in the modelling of nuclear forces, ab initio techniques have steadily progressed and are now able to reach several tens of isotopes up to mass A~100, as well as selected heavy nuclei. The long-term goal is to eventually extend such calculations to the whole nuclear chart, i.e. to several thousands of nuclei up to mass A~300. In this context, one of the main challenges consists in devising computational schemes that can tackle complex, i.e. doubly open-shell, systems and at the same time scale gently with mass number. I will discuss current efforts towards this objective, present recent examples of ab initio calculations of doubly open-shell nuclei and address future perspectives.

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