JuliaQCD: Portable lattice QCD package in Julia language

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JuliaQCD is a versatile tool for lattice Quantum Chromodynamics (QCD), a key framework in particle physics for studying the strong force that binds quarks and gluons. Designed for seamless scalability, it runs efficiently on CPU/GPU systems from laptops to supercomputers (e.g. Fugaku). By implementing standard algorithms like Hybrid Monte Carlo (HMC) with a focus on rapid and efficient research, JuliaQCD enables scientists to explore fundamental physics with unprecedented flexibility and speed.

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