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GFMC calculations of one-nucleon overlaps and spectroscopic factors in light nuclei[1] IVAN BRIDA, STEVEN C. PIEPER, R.B. WIRINGA, Argonne National Laboratory — We present one-nucleon overlap functions for light ($A \leq 10$) nuclei computed from ab-initio Green's function Monte Carlo wave functions. The wave functions are based on realistic two- and three-nucleon Av18+IL7 interactions. Our overlap functions extend into long-range regions with correct asymptotics. The overlap functions are used to obtain spectroscopic factors and can serve as an input for low-energy reaction calculations.

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