Schauder estimates at nearly linear growth

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Variational integrals at nearly linear growth appear in the theory of plasticity with logarithmic hardening, that is the borderline configuration between plasticity with power hardening and perfect plasticity. The related (very challenging) regularity theory for minima has been intensively developed over the last 25 years, see e.g. the work of Frehse & Seregin '99, Fuchs & Mingione '00, Bildhauer '03, Beck & Schmidt '13, Beck & Bulíček & Gmeineder '20, Di Marco & Marcellini '20, Gmeineder & Kristensen '22, De Filippis & Mingione '23. In this respect, we will discuss an intrinsic approach to the theory of Schauder for general nonautonomous functionals at nearly linear growth that covers the most common model examples in the literature.

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