

Limiting Subdifferentials of Indefinite Integrals¹

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We compute the limiting subdifferential $\partial F(\bar{x})$ of the indefinite integral of the form $F(x) = \int_a^x f(t)dt$, where f is an essentially bounded measurable function, or a continuous function on a neighborhood of \bar{x} (except for, possibly, \bar{x}), or a step-function which has a countable number of steps around \bar{x} . The related problem of computing the Aumann integral of the limiting subdifferential mapping $\partial f(\cdot)$, where f is a Lipschitz real function defined on an open set $U \subset \mathbb{R}^n$, is also investigated.

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