

**Clarke, F. H.; Ledyaev, Yu. S.; Stern, R. J.**

**Complements, approximations, smoothings and invariance properties.** (English)

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J. Convex Anal. 4, No. 2, 189-219 (1997).

Consider a closed nonempty set  $S$  in the usual  $n$ -dimensional Euclidean space. Let  $x$  be a point in  $S$ . The proximal normal cone to  $S$  at  $x$  is a geometric concept of great importance for the differentiability analysis of the boundary of  $S$ . The authors establish some links between proximal normal cones to  $S$  and proximal normal cones to the closure of the complement of  $S$ . As an application of the general “complementary proximal normal formula”, the authors obtain some invariance properties for a class of differential inclusions.

Reviewer: [A.Seeger \(Avignon\)](#)

**MSC:**

[49J52](#) Nonsmooth analysis

[26B05](#) Continuity and differentiation questions

Cited in **9** Documents

**Keywords:**

[proximal normal cone](#); [differential inclusions](#)

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