

## **Abstract**

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### **A VU-point of view of nonsmooth optimization**

The realization that many nondifferentiable functions exhibit some form of structured nonsmoothness has been attracting the efforts of many researchers in the last decades. Identifying theoretically and computationally certain manifolds where a nonsmooth function behaves smoothly poses challenges for the nonsmooth optimization community. We review a sequence of milestones in the area that led to the development of algorithms of the bundle type that can track the region of smoothness and mimic a Newton algorithm to converge with superlinear speed. The new generation of bundle methods is sufficiently versatile to deal with structured objective functions, even when the available information is inexact.

#### Reference

A VU-POINT OF VIEW OF NONSMOOTH OPTIMIZATION, Claudia Sagastizábal  
Proc. Int. Cong. of Math. – 2018, Rio de Janeiro, Vol. 3 (3785–3806)