

[Ludwig, Ursula](#)

Morse-Smale-Witten complex for gradient-like vector fields on stratified spaces. (English)

[Zbl 1131.58008](#)

Chéniot, Denis (ed.) et al., Singularity theory. Proceedings of the 2005 Marseille singularity school and conference, CIRM, Marseille, France, January 24–February 25, 2005. Dedicated to Jean-Paul Brasselet on his 60th birthday. Singapore: World Scientific (ISBN 978-981-270-410-8/hbk). 683-713 (2007).

Author's Abstract: The aim of this article is to generalise the notion of gradient-like vector fields to stratified spaces and to establish the associated Morse-Smale-Witten complex. The Morse-inequalities which relate the number of singular points of the vector field to the homology of the stratified space are a consequence of the existence of this complex.

For the entire collection see [\[Zbl 1111.14001\]](#).

Reviewer: [Nils Ackermann \(México, D.F.\)](#)

MSC:

[58E05](#) Abstract critical point theory (Morse theory, Lyusternik-Shnirel'man theory, etc.) in infinite-dimensional spaces

[58A35](#) Stratified sets

[Cited in 2 Documents](#)

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[stratified space](#); [stratified gradient-like vector field](#); [Morse theory](#)