

VU Research Portal

Morse-Conley-Floer Homology

Rot, T.O.

2014

document version

Publisher's PDF, also known as Version of record

[Link to publication in VU Research Portal](#)

citation for published version (APA)

Rot, T. O. (2014). *Morse-Conley-Floer Homology*.

General rights

Copyright and moral rights for the publications made accessible in the public portal are retained by the authors and/or other copyright owners and it is a condition of accessing publications that users recognise and abide by the legal requirements associated with these rights.

- Users may download and print one copy of any publication from the public portal for the purpose of private study or research.
- You may not further distribute the material or use it for any profit-making activity or commercial gain
- You may freely distribute the URL identifying the publication in the public portal ?

Take down policy

If you believe that this document breaches copyright please contact us providing details, and we will remove access to the work immediately and investigate your claim.

E-mail address:

vuresearchportal.ub@vu.nl

MORSE-CONLEY-FLOER HOMOLOGY

Thomas Olaf Rot

This research was partially funded by the Netherlands Organisation for Scientific Research (NWO).



Netherlands Organisation for Scientific Research

Cover: A dynamical system is lifted to the graph of a Lyapunov function of the isolated invariant set in red. The Lyapunov function is used to define Morse-Conley-Floer homology. The equilibria located at the peak and valley are two other isolated invariant sets. These isolated invariant sets are in a Morse decomposition, which gives rise to a spectral sequence in Morse-Conley-Floer homology. On the back the reversed flow is depicted, which expresses duality in Morse-Conley-Floer (co)-homology.

ISBN 978-94-6259-399-2

Copyright © Thomas Olaf Rot, 2014

Printed by Ipskamp drukkers, the Netherlands

VRIJE UNIVERSITEIT

MORSE-CONLEY-FLOER HOMOLOGY

ACADEMISCH PROEFSCHRIFT

ter verkrijging van de graad Doctor aan
de Vrije Universiteit Amsterdam,
op gezag van de rector magnificus
prof.dr. F.A. van der Duyn Schouten,
in het openbaar te verdedigen
ten overstaan van de promotiecommissie
van de Faculteit der Exacte Wetenschappen
op maandag 1 december 2014 om 15.45 uur
in de aula van de universiteit,
De Boelelaan 1105

door

Thomas Olaf Rot

geboren te Schagen

promotor: prof.dr. R.C.A.M. van der Vorst
copromotor: dr. F. Pasquotto