

Essential Curriculum Vitae – Moritz Mercker

- Since Nov **2012:** **Postdoctoral** position at University of Heidelberg
in the group of Prof. Dr. Anna Marciniak-Czochra
- 2012:** Warden and birdwatcher on Trischen island for the NABU Schleswig-Holstein
- 2012:** **Interdisciplinary Ph.D.** thesis (biology/physics/mathematics) at University of Heidelberg,
Grade: Summa cum laude
(supervisor: Prof. Dr. Dr. h.c. mult W. Jäger)
- 2009-2012:** Research associate of the WIN-project (Heidelberg Academy of Science and Humanities)
(supervisor: Pr. Dr. Anna Marciniak-Czochra)
- 2008-2012:** Ph.D. student of the ViroQuant-Project
(supervisor: Prof. Dr. Dr. h.c. mult W. Jäger)
- 2011:** **Diploma in mathematics**, University Heidelberg
(Graduate mathematician, supervisor: Prof. Dr. Dr. hc. mult W. Jäger)
Grade: Excellent
- 2006-2011:** Studies of Mathematics at University of Heidelberg
- 2006:** **Diploma in biology**, University Kiel
(Graduate Biologist, supervisor: Prof. Dr. F. Kempken)
Grade: Excellent
- 2000-2006:** Studies of Biology at University of Kiel
- 1999-2000:** Civilian service as a birdwatcher on the island Juist
- 1999:** Abitur at Freie Waldorfschule Oldenburg
(A-Levels High School Certificate)

Publications and thesis – Moritz Mercker

MERCKER M (2012)

Models, numerics and simulations of deforming biological surfaces,
Ph.D. thesis, (supervisors: Prof. Dr. Dr. h.c. mult Willi Jäger and
Prof. Dr. Matthias Weiss), Heidelberg University.

MERCKER M, PTASHNYK M, KÜHNLE J, HARTMANN D, WEISS M, JÄGER W (2012)

A multiscale approach to curvature modulated sorting in biological membranes,
Journal of Theoretical Biology, Vol. 301 (May), pp. 67-82.

MERCKER M, RICHTER T, HARTMANN D (2011)

Sorting mechanism and communication in phase separating coupled monolayers,
J Phys Chem B. Volume 115 Issue 40 Page 11739-45.

MERCKER M (2011)

Ein kontinuierliches, dynamisches Modell der Deformation und Phasenseparation von
Biomembranen,
Dipoma thesis in mathematics, Heidelberg (supervisor: Prof. Dr. Dr. h.c. mult Willi Jäger)

MERCKER M, KOLLATH-LEISS K, ALLGAIER S, WEILAND N, KEMPKEN K (2009)

The BEM46-like protein appears to be essential for hyphal development upon ascospore
germination in *Neurospora crassa* and is targeted to the endoplasmic reticulum,
Current Genetics, Volume 55, Issue 2, Page 151.

MERCKER M (2006)

Funktionsanalyse des bem46-Homologs in *Neurospora crassa*,
Dipoma thesis in biology, Kiel (supervisor: Prof. Dr. F. Kempken)

In preparation / review

MERCKER M, HARTMANN D, ZIGMAN M, MARCINIAK-CZOCHRA A

A new model for symmetry break in *Hydra* polyps, in preparation

MERCKER M, HARTMANN D, MARCINIAK_CZOCHRA A

A mechanochemical model for embryonic pattern formation: Coupling tissue geometry with
morphogen expression, in preparation

MERCKER M, MARCINIAK-CZOCHRA A, HARTMANN D

Modeling and computing of the dynamics of deforming inhomogeneous biological surfaces,
in review.