

Dr. Heiko Dankert - Résumé

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Computational Vision Group & Division of Biology
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Experience

Postdoctoral Scholar 05/2006 -	Computational Vision & Biology California Institute of Technology (Caltech), Pasadena, USA
Research Associate 01/2001 - 04/2006	Geophysics Helmholtz Center GKSS, Hamburg, Germany
Visiting Scientist 08/2000 - 12/2000	Oceanic Engineering Nat. Cheng-Kung University, Tainan, Taiwan
Research Scientist 05/1999 - 01/2000	Remote Sensing Helmholtz Center GKSS, Hamburg, Germany

Projects:

12/2003 – 05/2006	German KFKI funded project MOSES
05/2001 – 12/2003	EU project MAXWAVE
05/2001 – 04/2003	EU project ENVOC
01/2001 – 04/2001	German BMBF funded project ODRAFLOOD

Education

Doctoral thesis in the field of Geophysics 05/2001 – 12/2003 Dr. rer. nat. (Ph.D.)	University of Hamburg, Germany 2003, magna cum laude
Mandarin Chinese Study (1-to-1) 02/2000 – 08/2000	Nat. Cheng-Kung University, Tainan, Taiwan
Diploma thesis in the field of Earth Sciences & Remote Sensing 05/1999 – 02/2000 Dipl.-Ing. (M.Sc.)	Helmholtz Center GKSS, Hamburg, Germany 2000, summa cum laude
Structural Engineering 10/1994 – 04/1999 Pre-Diploma	University of Rostock, Germany 1996, summa cum laude

Memberships

since 02/2006	Alexander von Humboldt Foundation
since 01/1997	German National Academic Foundation for the Highly Gifted (Studienstiftung)

Awards

2006	Feodor-Lynen Research Fellowship of the Alexander von Humboldt Foundation
2005	JSPS Postdoctoral Fellowship (Japan Society for the Promotion of Sciences, 2 years, not taken)
2004	Award for the best Doctoral Thesis from the Assoc. for Prom. of the Helmholtz Center GKSS
1997	Full Fellowship of the German National Academic Foundation for the Highly Gifted

Languages German, English,
Chinese-Mandarin (intermediate), Russian (beginner)

Skills (expert)

1. various interpreted languages (Matlab, IDL, PV-Wave, ...)
2. various higher languages (F, C/C++, P, B)
3. various operating platforms (UNIX, Linux, Mac, Windows)

Interests Hiking, Cycling, Fitness, Sailing, Swimming, Reading, Theatregoer & Concertgoer
Asian culture with focus on China & Taiwan

References

1. Prof. Dr. habil. Hans von Storch, phone: +49 (4152) 87 1831, email: storch@gkss.de
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3. Prof. Dr. David J. Anderson, phone: +1 (626) 395 6821, email: wuwei@its.caltech.edu
4. Dr. Donald Thompson, phone: +1 (240) 228 4559, email: Donald_Thompson@jhuapl.edu
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6. Prof. Dr.-Ing. Chia Chuen Kao, phone: +886 (6) 234 4953, email: kaoshih@mail.ncku.edu.tw
7. Dr. Heinz Günther, phone: +49 (4152) 87 1504, email: guenther@gkss.de
8. Prof. Dr. habil. Werner Alpers, phone: +49 (40) 42838 5432, email: alpers@ifm.uni-hamburg.de

Peer-Reviewed Publications

Dankert, H., Zelnik, L., Anderson, D.J., Perona, P., *Unsupervised Analysis of the Complex Behaviours of Drosophila Melanogaster*, IEEE Trans. Pattern Analysis and Machine Intelligence, to be submitted 2008.

Dankert, H., Watanabe, K., Tayler, T., Hergarden, A., Wang, L.M., Perona, P., Anderson, D.J., *Automated Monitoring and Analysis of the Complex Behaviours of Drosophila Melanogaster*, Nature Methods, to be submitted 2008.

Wang, L.M., Dankert, H., Watanabe, K., Anderson, D.J., *A common genetic target for environmental and heritable influences in aggressiveness in Drosophila*, Proc. Nat. Acad. Sci., submitted 2007.

Dankert, H., *High-Resolution Surface-Current Fields and Bathymetries using a Marine Radar*, Geophysical Research Letters, submitted 2007.

Horstmann, J., and Dankert, H., *Estimation of Friction Velocity using Marine Radar*, Journal of Geophysical Research, submitted 2007.

Dankert, H., Herman, A., Günther, H., and Niemeyer, H.D., *Regional Shallow-Water Wave Modelling using k-Model and SWAN in Coastal Areas of the German Bight*, Journal of Geophysical Research, submitted 2007.

Dankert, H., and Horstmann, J., *A Marine-Radar Wind Sensor*, Journal of Atmospheric and Oceanic Technology, Vol. 24, No. 9, pp. 1629-1642, doi: 10.1175/JTECH2083.1, 2007.

Dankert, H., Horstmann, J., and Rosenthal, W., *Wind and Wave Field Measurements using Marine X-Band Radar-Image Sequences*, IEEE Journal of Oceanic Engineering – Special Issue, Vol. 30, Iss. 3, doi: 10.1109/JOE.2005.857524, pp. 534-542, 2005.

Dankert, H., and Rosenthal, W., *Ocean Surface Determination from X-Band Radar-Image Sequences*, Journal of Geophysical Research - Oceans, Vol. 109, C04016, doi:10.1029/2003JC002130, 2004.

Dankert, H.: *Measurement of Waves, Wave Groups, and Wind Fields using Nautical Radar-Image Sequences*. Dissertation, University of Hamburg, Department of Earth Sciences, 2003, external GKSS report, GKSS 2004/4, ISSN 0344-9629, 2004.

Dankert, H., Horstmann, J., and Rosenthal, W., *Ocean Wind Fields Retrieved from Radar-Image Sequences*, Journal of Geophysical Research - Oceans, Vol. 108, No. C11, 3352, doi: 10.1029/2003JC002056, 2003.

Dankert, H., Horstmann, J., Lehner, S. and Rosenthal, W., *Detection of Waves Groups in SAR Images and Radar-Image Sequences*, IEEE Transaction on Geoscience and Remote Sensing, Vol. 41, No. 6, June 2003.

Dankert, H., Horstmann, J., Günther, H., and Rosenthal, W., *Measurement of Waves Groups using Radar-Image Sequences*, Elsevier Oceanography Series, 69, Building the European Capacity in Operational Oceanography, Proceedings of the Third International Conference on EuroGOOS, Athens, Greece, 3-6 December 2002, pp. 115-121, ISBN: 0-444-51550-X.

Dankert, H., Horstmann, J., and Rosenthal, W., *Detection of Extreme Waves in SAR Images and Radar-Image Sequences*, 21st International Conference on Offshore Mechanics and Arctic Engineering (OMAE), Oslo, Norway, June 23-28, 2002

Dankert, H.: *Spatial Analysis of the Diffraction of Wave Fields using Image Sequences and Simulations (in German)*. University of Rostock, Department of Civil Engineering, external GKSS report, GKSS 2000/49, ISSN 0344-9629, 2000.