

<i>Surname</i>	<i>First name</i>	<i>Date of birth</i>	<i>Nationality</i>
<b>Bethge</b>	<b>Matthias</b>	<b>26.02.1973</b>	<b>German</b>
<i>Title</i>	<b>Dr. rer. nat.</b>		
<i>Current position</i>	<b>Professor of Computational Neuroscience</b>		
<i>Address</i>	<b>Werner Reichardt Centre for Integrative Neuroscience, Max Planck Institute for Biological Cybernetics, Eberhard-Karls University, Tübingen</b>		

Child care period  No  yes; from      to

#### ACADEMIC EDUCATION

<i>Year</i>	<i>Degree</i>	<i>College or University (Country)</i>	<i>Field of study</i>
<b>1998</b>	<b>Diploma</b>	Georg-August-University and MPI for Dynamics and Self-organization, Goettingen	Physics (synaptic dynamics)
<b>2003</b>	<b>Dr.rer.nat.</b>	University Bremen	Computational Neuroscience (Neural Coding)

#### PROFESSIONAL EXPERIENCE

<i>Period</i>	<i>Institution</i>	<i>Position</i>	<i>Discipline</i>
<b>Oct 2009-today</b>	Eberhard Karls University, Tübingen	Professor	Computational Neuroscience
<b>2007-2009</b>	Max Planck Institute for Biological Cybernetics, Tübingen	Independent Research Group Leader (funded by the Bernstein Award)	Computational Neuroscience
<b>2003-2006</b>	Redwood Neuroscience Institute, Menlo Park/ Redwood Center for Theoretical Neuroscience, UC Berkeley MPI for Biological Cybernetics, Department for Empirical Inference	PostDoc	Computational Neuroscience

#### TEN RELEVANT PUBLICATIONS WITHIN THE LAST FIVE YEARS

- Hosseini, R., F. H. Sinz and M. Bethge (2010) Lower bounds on the redundancy of natural images. *Vision Research* 50(22), 2213-2222 (2010).
- Ecker AS, Berens P, Keliris G, Bethge M, Logothetis NK, Tolias AS (2010) Deccorelated Firing in Cortical Microcircuits. *Science* 327 (5965): 584-7. (2010).
- Macke, J. H., S. Gerwin, L. W. White, M. Kaschube and M. Bethge (2010) Gaussian process methods for estimating cortical maps. *NeuroImage Epub ahead*, 1-12 (2010).

04. Gerwin, S., J. H. Macke and M. Bethge (2009) Bayesian population decoding of spiking neurons. *Frontiers in Computational Neuroscience* 3(21), 1-28 (2009).
05. Sinz F. H. Gerwin S, Bethge M. Characterization of the p-generalized Normal Distribution. *Journal of Multivariate Analysis*, 100(5): 817-820.
06. Eichhorn, J., F. H. Sinz and M. Bethge (2009) Natural Image Coding in V1: How Much Use is Orientation Selectivity? *PLoS Computational Biology* 5(4:e1000336), 1-16 (2009).
07. Macke JH, Berens P, Ecker AS, Tolias AS, Bethge M (2009) Generating Spike Trains with Specified Correlation Coefficients. *Neural Computation* 21(2), 397-423. (2009).
08. Bethge, M. (2006) Factorial coding of natural images: how effective are linear models in removing higher-order dependencies? *Journal of the Optical Society of America A* 23(6), 1253-1268 (2006).
09. Silberberg, G., M. Bethge, H. Markram, K. Pawelzik and M. Tsodyks Dynamics of Population Rate Codes in Ensembles of Neocortical Neurons. *Journal of Neurophysiology* 91(2), 704-709 (02 2004).
10. Bethge, M., D. Rotermund and K. Pawelzik Optimal Short-Term Population Coding: When Fisher Information Fails. *Neural Computation* 14(10), 2317-2351 (10 2002).

#### HONORS AND AWARDS

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- 2004 Best thesis award "Bremer Studienpreis"
- 2006 Bernstein prize for Computational Neuroscience
- 2007 Selected by the Magazine Capital as a member of the "Junge Elite" in the section "Germany's top 40 scientists under 40".
- 2008 Coordinator of the Bernstein Center for Computational Neuroscience Tübingen.