

Veranstaltungsort:

Hanse-Wissenschaftskolleg  
Lehmkuhlenbusch 4  
27753 Delmenhorst

Hanse



Wissenschaftskolleg



**International Workshop**

# **Aspects of Adaptive Cortex Dynamics**

**Delmenhorst, September 4 – 7, 2008**

## **Programme**

**Organizers:**

Prof. Dr. Klaus Pawelzik  
Dr. Udo Ernst  
Institute for Theoretical Physics  
University of Bremen

## Wednesday, 3<sup>rd</sup> September 2008

Arrival, Check-in Hotel

## Thursday, 4<sup>th</sup> September 2008

- 09:00 – 09:30      Opening and Welcome
- 09:30 – 10:15      Hamutal Slovin  
“Population response of collinear effects and precise spatio-temporal patterns in the visual cortex: evidence from voltage-sensitive dye imaging”
- 10:15 – 11:00      *Coffee Break***
- 11:00 – 11:45      Dirk Jancke  
“Dynamic computation in early visual cortex captured by VSD imaging and parallel electrophysiology”
- 11:45 – 12:30      Poster session
- 12:30 – 14:00      *Lunch at HWK***
- 14:00 – 14:45      Matthias Bethge  
“Hoch much can bandpass filtering, orientation selectivity, and divisive normalization contribute to the reduction of redundancy in natural images?”
- 14:45 – 15:30      Peter König  
“Integration of information in overt attention“
- 15:30 – 16:00      *Coffee Break***
- 16:30 – 18:00      Trip to Bremen, reception and guided tour at the “Cognium”
- 18:00 – 20:00      *Dinner at the “Cognium”***
- 20:00              Klaus Pawelzik  
“Does human balance behaviour reflect self-organized critical adaptive control?”
- 22:00              Return to Delmenhorst (directly to hotels)

## **Friday, 5<sup>th</sup> September 2008**

- 09:00 – 09:45      Günter Meinhardt  
“Detecting features and their combinations”
- 09:45 – 10:30      Felix Wichmann  
“Identifying critical features from psychophysical data”
- 10:30 – 11:15      *Coffee Break***
- 11:15 – 12:00      Udo Ernst  
“Contour integration: Evaluating models using  
psychophysical experiments“
- 12:00 – 13:30      *Lunch at HWK***
- 13:30 – 14:15      Wyeth Bair  
“Rapid adaptive properties of motion sensitive neurons in the  
macaque visual cortex“
- 14:15 – 15:00      Sophie Denève  
“Bayesian inference and learning in cortical networks”
- 15:00 – 15:30      *Coffee Break***
- 15:30 – 20:00      Bustransfer to Bremerhaven; guided tour “Auswandererhaus”  
Bremerhaven
- 20:00 – 22:30      *Dinner “Seute Deern” Bremerhaven***
- 22:30                      Return to Delmenhorst (directly to hotels)

## **Saturday, 6<sup>th</sup> September 2008**

- 09:00 – 09:45      Fred Wolf  
“Is visual cortical architecture adapted to the statistics of the  
visual world?”
- 09:45 – 10:30      Ulf Eysel  
“Dynamics of adaptive plasticity in the adult visual cortex  
following retinal lesions“
- 10:30 – 11:15      *Coffee Break***
- 11:15 – 12:00      Klaus Obermayer  
“Cortical plasticity and the cortical operating regime“
- 12:00 – 13:30      *Lunch at HWK***

13:30 – 14:15      Andreas Kreiter  
                          “Oscillatory synchronization as a neuronal mechanism of  
                          selective attention”

14:15 – 15:30      Poster session

**15:30 – 16:00      *Coffee Break***

16:00 – 18:00      Poster session

**18:30 – 21:00      *Dinner at HWK***

### **Sunday, 7<sup>th</sup> September 2008**

09:00 – 09:45      Dov Sagi  
                          “Perceptual learning: the problem of saturation and ways to  
                          avoid it“

09:45 – 10:30      Manfred Fahle  
                          “Dynamics of senso-motor coordination in prism adaptation”

**10:30 – 11:00      *Coffee Break***

11:00 – 12:00      Discussion

12:00 – 13:00      ***Lunch at HWK***

13:00                Departure