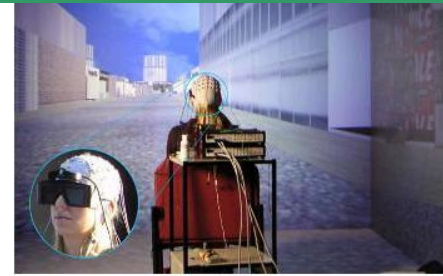


# g.tec(Austria) BCI Workshop September 30



The subject sitting in the CAVE connected to the BCI-system.

We have started selling BCI (Brain Computer Interface) system, which are produced by g.tec, Austria, in Japan. The g.tec system provides high speed processing with MATLAB/SIMULINK by optimized appropriate hardware interrupt control driver in order to run maximum speed of processing that is available within the system. By using MATLAB/SIMULINK and an appropriate driver the system realizes efficient real time feedback and creation of data processing modeling that are important for BCI.

Date : September 30(Wed),2009 13:30~16:00  
 Place : Seminar Room  
 Lecturer : Guenter Edlinger Dr. (g.tec CEO)  
 Sponsored : Guger Technologies OEG (g.tec)  
 MIYUKI GIKEN Co.,LTD.

### Main topic

- definition of a brain computer interface
- the EEG, non-invasive recording of brain activity
- assets and drawbacks of EEG-based BCI
- BCI approaches: the slow cortical potentials
- BCI approaches: oscillatory activity, alpha-, mu- and beta rhythms
- BCI approaches: steady-state evoked potentials
- BCI approaches: the P-300 approach
- limits of speed and accuracy with EEG-based BCI applications
- introduction of required hardware and software
- practical introduction: electrode montage, EEG recording
- live BCI-experiment with volunteer subject(s)
- videos: examples of BCI applications
- discussions of BCI applications
- discussion

