Materials List for

# Measuring the Influence of Magnetic Vestibular Stimulation on Nystagmus, Self-Motion Perception, and Cognitive Performance in a 7T MRT

**Gerda Wyssen**[1,6], **Miranda Morrison**[2], **Athanasia Korda**[2], **Wilhelm Wimmer**[2,3], **Jorge Otero-Millan**[4], **Matthias Ertl**[1], **Andreas A. Szukics**[1,6], **Thomas Wyss**[2], **Franca Wagner**[5,6], **Marco D. Caversaccio**[2,3], **Georgios Mantokoudis**[2,6], **Fred W. Mast**[1,6]

[1]Department of Psychology, University of Bern [2]Department of Otorhinolaryngology, Head and Neck Surgery, Inselspital, University Hospital Bern and University of Bern [3]Hearing Research Laboratory, ARTORG Center for Biomedical Engineering Research, University of Bern [4]Herbert Wertheim School of Optometry and Vision Science, University of California [5]University Department of Diagnostic and Interventional Neuroradiology, Inselspital, Bern University Hospital, University of Bern [6]Translational Imaging Center (TIC), Swiss Institute for Translational and Entrepreneurial Medicine

## Corresponding Author

**Gerda Wyssen**
gerda.wyssen@unibe.ch

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## Materials

| Name | Company | Catalog Number | Comments |
|---|---|---|---|
| 3D Magnetometer | Metrolab Technology, Switzerland | THM1176-HF | Calibrated for 7 Tesla, with fibre optic cable, CE-labelled |
| AMIRA 6.3 (Software) | Thermo Fisher Scientific, USA | | Medical image processing and visualization software |
| Celeritas Fiber Optic Response Box Unit | Psychology Software Tools | | Response box |
| Celeritas Fiber Optic Response Unit | Psychology Software Tools | PST-100761 | Response buttons, 5 buttons for each hand |
| Ear plugs | | | |
| EEG cap | | | Any MRI safe EEG cap is suitable |
| Elastic band | | | Used to fixate the Magnetometer behind the ear |
| Ethernet cable (crossover) | Daetwyler | Uninet 5502 flex 4P FRNC/LSOH 522830.01 | |
| Ethernet cable adapter | TP-Link | UE305 | |
| Experimental laptop | | | Computer with enough performance, with Response Buttons software (e.g. Celeritas), software for running paradigm (e.g. MATLAB, PsychToolBox), Ethernet cable link to eye-tracking computer |
| Eye-tracking Goggles (Visual Eyes) | Interacoustics | 515b | Micromedical goggles with infrared camera: Point Grey Firefly, CE-labelled, modified for 7 Tesla, shielded firewire cable |
| Eye-tracking laptop | | | Computer with enough performance, with eye-tracking software (e.g. |

| | | | |
|---|---|---|---|
| | | | OpenIris), Ethernet cable link to experimental computer |
| Headband | | | MRI safe headband |
| Magnetom Terra 7T MRI Scanner | Siemens Healthcare, Erlangen Germany | | Located at Translational Imaging Center (TIC) in the Swiss Institute of Translational and Entrepreneurial Medicine (sitem-insel AG) in Bern, Switzerland |
| Magnetometer laptop | | | Computer with enough performance, with magnetometer software (e.g. EZMag3D) |
| MATLAB R2017b (Software) | MathWorks | | Experimental paradigm can be run e.g. with PsychToolBox (Brainard, D. H., & Vision, S. (1997). The psychophysics toolbox. Spatial vision, 10(4), 433-436.) |
| Metrolab EZMag3D v1.1.2 (Software) | Metrolab Technology, Switzerland | | 3D magnetometer software: https://www.metrolab.com/resources/downloads/ |
| MRI-Mirror | Siemens Healthcare, Erlangen Germany | | |
| OpenIris (Software) | | | Software to record and analyse the eye movements within the MRI-scanner. Reference: Otero-Millan, J., Roberts, D.C., Lasker, A., Zee, D.S., Kheradmand, A. Knowing what the brain is seeing in three dimensions: A novel, noninvasive, sensitive, accurate, and low-noise technique for measuring ocular torsion. Journal of Vision. 15 (14), 11, doi: 10.1167/15.14.11 (2015). |
| Pregnancy test | | | e.g. early pregnancy test stripes (10 mIU/mL) |
| Projector system | Hyperion Psychology Tools | | |
| Triangle Cushion | Siemens Healthcare, Erlangen Germany | | |