

**Erratum:** The following changes have been made according to the original version of my dissertation.

Title page and title back page have been modified to fit the needed formalities.

*The following sentence has been added at the end of the following section:*

Page 73, section 5.2.2: The investigation of this demeaning procedure has been suggested by a journal reviewer.

*The following sentence has been added within a section:*

Page 75, section 5.2.3, after the first break on this page (after '[...] features compared to the original time courses.'): This phase randomization procedure is done in a similar way like Allen et al. [8] has done their inconsistent Fourier phase shift, which they have investigated additionally to the above mentioned one.

*The following sentences have been added at the beginning of the following sections:*

Page 75, section 5.2.4: The investigations of this section are based on suggestions made by a journal reviewer.

Page 78, section 5.3: The investigations of this section are based on suggestions made by journal reviewers.

Page 79, section 5.4: The investigations of this section are based on suggestions made by journal reviewers.

*The following footnote has been changed to:*

Page 68, section 5.2.1, footnote 8: For the application of the Hungarian method, I rely on scripts offered by <http://www.mathworks.com/matlabcentral/fileexchange/6543-functions-for-the-rectangular-assignment-problem>. Using the Hungarian algorithm was suggested by a journal reviewer.

*The following changes in the following figure captions have been made:*

Page 38, figure 12, last sentence has been changed to: Assembled from Hornak [48] and adjusted.

Page 45, figure 13, first sentence has been changed to: This figure assembled from Hagmann et al. [43] depicts their structural connectomes with 66 (right) and 998 (left) nodes.

Page 49, figure 16, first sentence has been changed to: From Allen et al. [8] and adjusted.

Page 106, figure 48, last sentence has been changed to: Assembled from [8, 60] and adjusted.

Page 107, figure 49, last sentence has been changed to: Assembled from [8, 60] and adjusted.

Page 110, figure 50, last sentence has been changed to: Assembled from [20] and adjusted.

*The following references in the bibliography have been changed to:*

[20] Vince D. Calhoun, Jing Sui, Kent Kiehl, Jessica Turner, Elena Allen, and Godfrey Pearlson. Exploring the psychosis functional connectome: Aberrant intrinsic networks in schizophrenia and bipolar disorder. *Frontiers in Psychiatry*, 2(January):1–13, 2012. ISSN 16640640. doi: 10.3389/fpsy.2011.00075.

[48] Joseph P. Hornak. The Basics of MRI. URL <https://www.cis.rit.edu/htbooks/mri/index.html>.

[76] Vincenzo Nicosia, John Tang, Cecilia Mascolo, Mirco Musolesi, Giovanni Russo, and Vito Latora. Graph Metrics for Temporal Networks. In *Temporal Networks*, pages 15–40. 2013. doi: 10.1007/978-3-642-36461-7\_2. URL [http://link.springer.com/10.1007/978-3-642-36461-7\\_2](http://link.springer.com/10.1007/978-3-642-36461-7_2).