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Andersson, J.L.R. et al. (2001) 'Modeling Geometric Deformations in EPI Time Series', *NeuroImage*, 13(5), pp. 903–919. Available at: <https://doi.org/10.1006/nimg.2001.0746>.

'Artifacts in Diffusion MRI' (no date). Available at: http://stbb.nichd.nih.gov/pdf/9780195369779_Jone-Pierpaoli.pdf.

Ashburner, J. (2007) 'A fast diffeomorphic image registration algorithm', *NeuroImage*, 38(1), pp. 95–113. Available at: <https://doi.org/10.1016/j.neuroimage.2007.07.007>.

Ashburner, J. (2009) 'Computational anatomy with the SPM software', *Magnetic Resonance Imaging*, 27(8), pp. 1163–1174. Available at: <https://doi.org/10.1016/j.mri.2009.01.006>.

Ashburner, J. and Friston, K.J. (2000a) 'Voxel-Based Morphometry—The Methods', *NeuroImage*, 11(6), pp. 805–821. Available at: <https://doi.org/10.1006/nimg.2000.0582>.

Ashburner, J. and Friston, K.J. (2000b) 'Voxel-Based Morphometry—The Methods', *NeuroImage*, 11(6), pp. 805–821. Available at: <https://doi.org/10.1006/nimg.2000.0582>.

Ashburner, J. and Friston, K.J. (2005) 'Unified segmentation', *NeuroImage*, 26(3), pp. 839–851. Available at: <https://doi.org/10.1016/j.neuroimage.2005.02.018>.

Ashburner, J. and Friston, K.J. (2009) 'Computing average shaped tissue probability templates', *NeuroImage*, 45(2), pp. 333–341. Available at: <https://doi.org/10.1016/j.neuroimage.2008.12.008>.

Ashburner, J. and Klöppel, S. (2011) 'Multivariate models of inter-subject anatomical variability', *NeuroImage*, 56(2), pp. 422–439. Available at: <https://doi.org/10.1016/j.neuroimage.2010.03.059>.

Attwell, D. and Iadecola, C. (2002) 'The neural basis of functional brain imaging signals', *Trends in Neurosciences*, 25(12), pp. 621–625. Available at: [https://doi.org/10.1016/S0166-2236\(02\)02264-6](https://doi.org/10.1016/S0166-2236(02)02264-6).

Barnes, J. et al. (2008) 'A comparison of methods for the automated calculation of volumes and atrophy rates in the hippocampus', *NeuroImage*, 40(4), pp. 1655–1671. Available at: <https://doi.org/10.1016/j.neuroimage.2008.01.012>.

Buxton, R.B. (2002) *Introduction to Functional Magnetic Resonance Imaging: Principles and Techniques*. Cambridge: Cambridge University Press. Available at: <http://dx.doi.org/10.1017/CBO9780511549854>.

Buxton, R.B. et al. (2004) 'Modeling the hemodynamic response to brain activation', *NeuroImage*, 23, pp. S220-S233. Available at:
<https://doi.org/10.1016/j.neuroimage.2004.07.013>.

By:van Buchem, MA (van Buchem, MA); Tofts, PS (Tofts, PS) (2000) 'Magnetization transfer imaging', *NEUROIMAGING CLINICS OF NORTH AMERICA* – *NEUROIMAGING CLINICS OF NORTH AMERICA*, 10(4). Available at:
http://apps.webofknowledge.com/full_record.do?product=UA&search_mode=GeneralSearch&qid=3&SID=S12r93sw8L3b7BInz7B&page=1&doc=1.

Chupin, M. et al. (2007) 'Anatomically constrained region deformation for the automated segmentation of the hippocampus and the amygdala: Method and validation on controls and patients with Alzheimer's disease', *NeuroImage*, 34(3), pp. 996–1019. Available at:
<https://doi.org/10.1016/j.neuroimage.2006.10.035>.

Daunizeau, J. et al. (2013) 'An electrophysiological validation of stochastic DCM for fMRI', *Frontiers in Computational Neuroscience*, 6. Available at:
<https://doi.org/10.3389/fncom.2012.00103>.

'Dynamic magnetic resonance imaging of human brain activity during primary sensory stimulation.' (15AD) *Proceedings of the National Academy of Sciences of the United States of America*, 89(12). Available at: <http://www.ncbi.nlm.nih.gov/pmc/articles/PMC49355/>.

Edelman, R.R., Hesselink, J.R. and Zlatkin, M.B. (1996) *MRI: clinical magnetic resonance imaging volume 1*. 2nd ed. Philadelphia: Saunders.

FIRST - FslWiki (no date). Available at: <http://fsl.fmrib.ox.ac.uk/fsl/fslwiki/FIRST>.

Fischl, B. and Dale, A.M. (2000) 'Measuring the thickness of the human cerebral cortex from magnetic resonance images', *Proceedings of the National Academy of Sciences*, 97(20), pp. 11050–11055. Available at: <https://doi.org/10.1073/pnas.200033797>.

Friston, K. and Penny, W. (2011) 'Post hoc Bayesian model selection', *NeuroImage*, 56(4), pp. 2089–2099. Available at: <https://doi.org/10.1016/j.neuroimage.2011.03.062>.

Friston, K.J., Harrison, L. and Penny, W. (2003) 'Dynamic causal modelling', *NeuroImage*, 19(4), pp. 1273–1302. Available at: [https://doi.org/10.1016/S1053-8119\(03\)00202-7](https://doi.org/10.1016/S1053-8119(03)00202-7).

Glover, G.H., Li, T.-Q. and Ress, D. (2000) 'Image-based method for retrospective correction of physiological motion effects in fMRI: RETROICOR', *Magnetic Resonance in Medicine*, 44(1), pp. 162–167. Available at:
[https://doi.org/10.1002/1522-2594\(200007\)44:1<162::AID-MRM23>3.0.CO;2-E](https://doi.org/10.1002/1522-2594(200007)44:1<162::AID-MRM23>3.0.CO;2-E).

Golay, Xavier PhD* (no date) 'Perfusion Imaging Using Arterial Spin Labeling', *Topics in Magnetic Resonance Imaging*, 15(1), pp. 10–27. Available at:
<http://ovidsp.ovid.com/ovidweb.cgi?T=JS&CSC=Y&NEWS=N&PAGE=fulltext&AN=00002142-200402000-00003&LSLINK=80&D=ovft>.

Good, C.D. et al. (2001) 'A Voxel-Based Morphometric Study of Ageing in 465 Normal Adult Human Brains', *NeuroImage*, 14(1), pp. 21–36. Available at:
<https://doi.org/10.1006/nimg.2001.0786>.

Hobbs, N.Z. et al. (2011) 'The structural involvement of the cingulate cortex in premanifest and early Huntington's disease', *Movement Disorders*, 26(9), pp. 1684–1690. Available at: <https://doi.org/10.1002/mds.23747>.

Huettel, S.A., Song, A.W. and McCarthy, G. (2014) Functional magnetic resonance imaging. Third edition. Sunderland, Massachusetts, U.S.A.: Sinauer Associates, Inc., Publishers.

Human Brain Function (no date). Available at: <http://www.fil.ion.ucl.ac.uk/spm/doc/books/hbf1/>.

Jezzard, P. and Balaban, R.S. (1995) 'Correction for geometric distortion in echo planar images from B0 field variations', *Magnetic Resonance in Medicine*, 34(1), pp. 65–73. Available at: <https://doi.org/10.1002/mrm.1910340111>.

Jezzard, P., Matthews, P.M. and Smith, S.M. (2001) Functional magnetic resonance imaging: an introduction to methods. Oxford: Oxford University Press.

Johansen-Berg, H. and Behrens, T.E.J. (eds) (2014) Diffusion MRI: from quantitative measurement to in vivo neuroanatomy. Second edition. Amsterdam: Academic Press. Available at: <http://www.sciencedirect.com/science/book/9780123964601>.

John Detre's slides on ASL fMRI (no date). Available at: <https://cfn.upenn.edu/perfusion/index.htm>.

Johnson, G. (no date) 'Absolute Beginners Guide to Perfusion MRI'. Available at: <http://cds.ismrm.org/ismrm-2008/files/Syllabus-036.pdf>.

Jones, D.K. (2011) Diffusion MRI: theory, methods, and applications. New York: Oxford University Press.

Kahan, J. and Foltynie, T. (2013) 'Understanding DCM: Ten simple rules for the clinician', *NeuroImage*, 83, pp. 542–549. Available at: <https://doi.org/10.1016/j.neuroimage.2013.07.008>.

Le Bihan, D. (2003) 'Looking into the functional architecture of the brain with diffusion MRI', *Nature Reviews Neuroscience*, 4(6), pp. 469–480. Available at: <https://doi.org/10.1038/nrn1119>.

Li, B. et al. (2011) 'Generalised filtering and stochastic DCM for fMRI', *NeuroImage*, 58(2), pp. 442–457. Available at: <https://doi.org/10.1016/j.neuroimage.2011.01.085>.

Logothetis, N.K. (2008a) 'What we can do and what we cannot do with fMRI', *Nature*, 453(7197), pp. 869–878. Available at: <https://doi.org/10.1038/nature06976>.

Logothetis, N.K. (2008b) 'What we can do and what we cannot do with fMRI', *Nature*, 453(7197), pp. 869–878. Available at: <https://doi.org/10.1038/nature06976>.

Marreiros, A.C., Kiebel, S.J. and Friston, K.J. (2008) 'Dynamic causal modelling for fMRI: A two-state model', *NeuroImage*, 39(1), pp. 269–278. Available at: <https://doi.org/10.1016/j.neuroimage.2007.08.019>.

Mechelli, A. (2005) 'Structural Covariance in the Human Cortex', *Journal of Neuroscience*,

25(36), pp. 8303–8310. Available at: <https://doi.org/10.1523/JNEUROSCI.0357-05.2005>.

Mechelli, A. et al. (2005) 'Voxel-Based Morphometry of the Human Brain: Methods and Applications', Current Medical Imaging Reviews, 1(2), pp. 105–113. Available at: <https://doi.org/10.2174/1573405054038726>.

Norris, D.G. (2006) 'Principles of magnetic resonance assessment of brain function', Journal of Magnetic Resonance Imaging, 23(6), pp. 794–807. Available at: <https://doi.org/10.1002/jmri.20587>.

Parkes, L.M. and Detre, J.A. (2003) 'ASL: Blood Perfusion Measurements Using Arterial Spin Labelling', in P. Tofts (ed.) Quantitative MRI of the Brain. Chichester, UK: John Wiley & Sons, Ltd, pp. 455–473. Available at: <https://doi.org/10.1002/0470869526.ch13>.

Pennec, X., Cachier, P. and Ayache, N. (1999) 'Understanding the "Demon's Algorithm": 3D Non-rigid Registration by Gradient Descent', in C. Taylor and A. Colchester (eds) Medical Image Computing and Computer-Assisted Intervention – MICCAI'99. Berlin, Heidelberg: Springer Berlin Heidelberg, pp. 597–605. Available at: https://doi.org/10.1007/10704282_64.

Questions and Answers in MRI (no date). Available at: <http://mri-q.com/index.html>.

Razi, A. et al. (2015) 'Construct validation of a DCM for resting state fMRI', NeuroImage, 106, pp. 1–14. Available at: <https://doi.org/10.1016/j.neuroimage.2014.11.027>.

Rohlfing, T. (2012) 'Image Similarity and Tissue Overlaps as Surrogates for Image Registration Accuracy: Widely Used but Unreliable', IEEE Transactions on Medical Imaging, 31(2), pp. 153–163. Available at: <https://doi.org/10.1109/TMI.2011.2163944>.

Rosa, M.J., Friston, K. and Penny, W. (2012) 'Post-hoc selection of dynamic causal models', Journal of Neuroscience Methods, 208(1), pp. 66–78. Available at: <https://doi.org/10.1016/j.jneumeth.2012.04.013>.

Rueckert, D. et al. (1999) 'Nonrigid registration using free-form deformations: application to breast MR images', IEEE Transactions on Medical Imaging, 18(8), pp. 712–721. Available at: <https://doi.org/10.1109/42.796284>.

Schmitz, C. and Hof, P.R. (2005) 'Design-based stereology in neuroscience', Neuroscience, 130(4), pp. 813–831. Available at: <https://doi.org/10.1016/j.neuroscience.2004.08.050>.

Stephan, K.E. (2004) 'On the role of general system theory for functional neuroimaging', Journal of Anatomy, 205(6), pp. 443–470. Available at: <https://doi.org/10.1111/j.0021-8782.2004.00359.x>.

Stephan, K.E. et al. (2008) 'Nonlinear dynamic causal models for fMRI', NeuroImage, 42(2), pp. 649–662. Available at: <https://doi.org/10.1016/j.neuroimage.2008.04.262>.

Stephan, K.E. et al. (2010) 'Ten simple rules for dynamic causal modeling', NeuroImage, 49(4), pp. 3099–3109. Available at: <https://doi.org/10.1016/j.neuroimage.2009.11.015>.

Studholme, C., Hill, D.L.G. and Hawkes, D.J. (1999) 'An overlap invariant entropy measure of 3D medical image alignment', Pattern Recognition, 32(1), pp. 71–86. Available at:

[https://doi.org/10.1016/S0031-3203\(98\)00091-0](https://doi.org/10.1016/S0031-3203(98)00091-0).

Tofts, P. and John Wiley & Sons, Ltd (2003) Quantitative MRI of the brain: measuring changes caused by disease. Chichester, West Sussex: Wiley. Available at: <http://dx.doi.org/10.1002/0470869526>.

Triantafyllou, C. et al. (2005) 'Comparison of physiological noise at 1.5 T, 3 T and 7 T and optimization of fMRI acquisition parameters', *NeuroImage*, 26(1), pp. 243–250. Available at: <https://doi.org/10.1016/j.neuroimage.2005.01.007>.

Weiskopf, N. et al. (2006) 'Optimal EPI parameters for reduction of susceptibility-induced BOLD sensitivity losses: A whole-brain analysis at 3 T and 1.5 T', *NeuroImage*, 33(2), pp. 493–504. Available at: <https://doi.org/10.1016/j.neuroimage.2006.07.029>.

Wiggins, G.C. et al. (2006) '32-channel 3 Tesla receive-only phased-array head coil with soccer-ball element geometry', *Magnetic Resonance in Medicine*, 56(1), pp. 216–223. Available at: <https://doi.org/10.1002/mrm.20925>.

Wright, I.C. et al. (1995) 'A Voxel-Based Method for the Statistical Analysis of Gray and White Matter Density Applied to Schizophrenia', *NeuroImage*, 2(4), pp. 244–252. Available at: <https://doi.org/10.1006/nimg.1995.1032>.