

PSY214 Functional MRI Methodology
Fall 2014

Professor Mark D'Esposito
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office hours by appointment

Course will be held in Tolman 2129, Mondays 1:30-4:30 pm

September 1	<i>No class - Labor Day</i>
September 8	Introduction - D'Esposito
September 15	MRI Physics I - Inglis
September 22	MRI Physics II - Inglis
September 29	MRI Physics III - Inglis
October 6	Physiology of the BOLD signal - D'Esposito
October 13	Experimental Design - D'Esposito
October 20	Data Processing I - Brett/Poline
October 27	Data Processing II - Brett/Poline
November 3	Data Processing III – Brett/Poline
November 10	Data Processing IV – Flat mapping - Silver Data Processing V – Multivariate approaches - Kayser
November 17	<i>No class – Society for Neuroscience meeting/Academic Holiday</i>
November 24	Data Processing VI - Graph theory - Gallen/Vytlacil
December 1	Student presentations - D'Esposito

Reference textbooks

S.A. Huettel, A.W. Song, G McCarthy, Functional Magnetic Resonance Imaging, Sinauer, 2014

M.X. Cohen, Analyzing Neural Time Series Data: Theory and Practice, 2014

R. Poldrack, J. Mumford, TE Nichols, Handbook of Functional MRI Data Analysis, Cambridge University Press, 2011

R.L. Buxton, Introduction to Functional Magnetic Resonance Imaging, Cambridge Univ. Press, 2009

P. Jezzard, P.M. Matthews, S.M. Smith, Functional MRI: An Introduction to the Methods, Oxford University Press, 2003

C.T.W. Moonen, P.A. Bandettini, Functional MRI, Springer, 1999