

FURTHER READING



Variational Bayes

Chapter 1 and 2

<http://www.cse.buffalo.edu/faculty/mbeal/thesis/>

Bayesian Model Selection & Averaging

Bayesian model selection for group studies

Stephan KE, Penny WD, Daunizeau J, Moran RJ, Friston KJ

Neuroimage (2009) 46(4): 1004-1017

<http://www.sciencedirect.com/science/article/pii/S1053811909002638>

Markov Chain Monte Carlo

A quick introduction to Markov chains and Markov chain Monte Carlo

Waagepetersen R

http://people.math.aau.dk/~rw/Papers/mcmc_intro.pdf

Chapter on *sampling methods* in the book "pattern recognition and machine learning" Bishop C

Hierarchical Gaussian Filter

Uncertainty in perception and the Hierarchical Gaussian Filter

Mathys CD, Lomakina, EI, Daunizeau J, Iglesias S, Brodersen KH, Friston, KJ, & Stephan KE

Frontiers in Human Neuroscience (2014) 8:825

<http://doi.org/10.3389/fnhum.2014.00825>

Markov Decision Models

Planning and acting in partially observable stochastic domains

Kaelbling LP, Littman ML & Cassandra AR

Artificial Intelligence (1998), 101(1-2): 99–134

<https://www.cis.upenn.edu/~mkearns/papers/barbados/klc-pomdp.pdf>

Dynamic Causal Modeling for fMRI

Understanding DCM: Ten simple rules for the clinician

Kahan J, Foltynie T

Neuroimage (2013) 83: 542-549

<http://www.sciencedirect.com/science/article/pii/S105381191300760X>

Analyzing effective connectivity with functional magnetic resonance imaging.

Stephan KE and Friston KJ, WIREs Cognitive Science (2010), 1:446-459,

http://www.fil.ion.ucl.ac.uk/spm/doc/papers/Stephan_WIREsCognSci_1_446_2010.pdf

Dynamic Causal Modeling for EEG

Losing Control Under Ketamine: Suppressed Cortico-Hippocampal Drive Following Acute Ketamine in Rats, Moran RJ, Jones MW, Blockeel AJ, Adams RA, Stephan KE & Friston KJ
Neuropsychopharmacology (2015) 40: 268–277

<http://www.nature.com/npp/journal/v40/n2/abs/npp2014184a.html>

FURTHER READING



Bayesian Models for Perception

Petzschnner FH, Glasauer S, Stephan KE (2015) A Bayesian perspective on Magnitude Estimation. Trends in Cognitive Sciences. 19(5):285–293

Perception as Bayesian Inference, Knill CD & Richards W, 2008

Predictive Coding & Active Inference

Computational psychiatry: the brain as a phantastic organ

Friston KJ, Stephan KE, Montague R, Dolan RJ

Lancet Psychiatry (2014) 1:148–158

<http://www.fil.ion.ucl.ac.uk/~karl/Computational%20psychiatry.pdf>

Optimal inference with suboptimal models: Addiction & active Bayesian inference

Schwartenbeck P, FitzGerald THB, Mathys C, Dolan R, Wurst F, Kronbichler M, Friston K

Medical Hypotheses (2015) 84 :109–117

[http://www.medical-hypotheses.com/article/S0306-9877\(14\)00442-3/pdf](http://www.medical-hypotheses.com/article/S0306-9877(14)00442-3/pdf)

Reinforcement Learning

Decision-theoretic psychiatry, Huys QJM, Guitart-Masip M, Dolan RJ and Dayan P, Clin Psychol Sci (2015) 3(3):400-421

<http://quentinhuys.com/pub/HuysEa15-DecisionTheoreticPsychiatry.pdf>

Sutton & Barto, Reinforcement learning, MIT Press, 1998

<https://webdocs.cs.ualberta.ca/~sutton/book/the-book.html>

Machine Learning

PRoNTTo: Pattern Recognition for Neuroimaging Toolbox, J. Schrouff & M. J. Rosa & J. M. Rondina & A. F. Marquand & C. Chu & J. Ashburner & C. Phillips & J. Richiardi & J. Mourão-Miranda, Neuroinform (2013) 11:319–337