No.	Name	Background	Arrival	Departure	Subject of interest
1	Amini, Ladan	EEG/fMRI modeling and data	14/6	19/6	Differential connectivity graph (DCG): application to EEG data from epileptic patients".
2	Bellec, Pierre	fMRI statistics (worked with Keith a bit)			Bootstrap generation and evaluation of an fMRI simulation database
3	Bergounioux, Maitine	Mathematical methods/ stochastic Differential equations	14/6	19/6	Physical - neurological models to make the connection with mathematics. -The use of brain imagery for neurosciences.
4	Biscay, Rolando	Mathematical methods/ stochastic Differential equations	14/6	19/6	Stochastic modeling and estimation of parameters of dynamical systems.
5	Burrage, Kevin	Mathematical methods/ stochastic Differential equations	14/6	19/6	Stochastic modelling and simulation frameworks for the Life Sciences
6	Carbonell, Felix	Mathematical methods/ stochastic Differential equations	14/6	19/6	Numerical methods for the integration and estimation of Stochastic Differential Equations
7	Daffertshofer, Andreas	Neural Modeling	14/6	17/6	Impacts of statistical feedback on stochastic neural dynamics
8	Daunizeau, Jean	EEG/fMRI modeling and data			1) Neural fields? Should we consider spatial (cortical) propagation effects (of the sort that are accounted for in neural fields models) when modelling large-scale network activity (both for EEG and fMRI)? Another way of asking this question is: what are the effects that cannot be explained without accounting for spatial propagation phenomenons? This then leads to ask what mechanisms might cause functional specialization, i.e. the specific (and segregated) activation of remote cortical regions? Finally, if we were to deal with neural fields-like models, how can we approximate their behaviour on a low-dimensional space? In other words: how should we choose the low-dimensional space in which we will project the neural field? Suggested papers: [Hutt et al. 2003: Pattern formation in intracortical neuronal fields] [Coombes and Owen 2005: Bumps, breathers and waves in a neural network with spike frequency adaptation] [Wennekers

					2008: Tuned solutions in dynamic neural fields as building blocks for extended EEG models] [Daunizeau et al. 2009: Dynamic causal modelling of distributed electromagnetic responses] [Jirsa 2009: Beural field dynamics with local and global connectivity and time delays] 2) Stochastic dynamics? Should we consider stochastic dynamical systems when modelling meso/macro-scale cortical activity? Are there experimental conditions that exhibit more significant stochastic effects in brain responses, as measured with, e.g., EEG and fMRI? Can it be used to model inter-trial variability in, e.g., ERPs? More importantly, owing to the complexity of stochastic DCM inversion, is it simply worth doing it? [Friston et al. 2008: Dynamic Expectation Maximization] [Harrison et al. 2005: Stochastic models of neuronal dynamics] [Marreiros et al. 2009: Population dynamics under the Laplace assumption]
9	David, Olivier	EEG/fMRI modeling and data	14/6	18/6	Studying the dynamics of MEG/EEG deep sources using DCM
10	De la Cruz Cancino, Hugo Alexander	Mathematical methods/ stochastic Differential equations			
11	Evans, Alan	Computational Neuroanatomy			Empirical constraints for neural modeling
12	Faugeras, Olivier	Neural Modeling			
13	Galka, Andreas	EEG/fMRI modeling and data			State space modeling of fMRI and EEG time series EEG/MEG source estimation Predictive modeling by parametric models: How to fit parameters? relationship between "variational-Bayes" and classical numerical optimisation? Which level of description of neuronal processes we should aim for in the future, in order to map the data (and prior knowledge) onto actually relevant quantities (instead rather mechanically to abstract states the relevance of

					which is uncertain or doubtful)
14	Harrison, Lee	EEG/fMRI modeling and data	14/6	21/6	spatio-temporal models of fMRI; translation of methods between M/EEG and fMRI, e.g. Laplacian based spatial models, probabilistic masks; what are the benefits of Bayesian spatial models over classical statistics using random field theory? given inter-subject variability, are detailed spatial models necessary?
15	Hilgetac, Claus C.	Computational Neuroanatomy	14/6	20/6	- what features of neural structure, in particular neural connectivity, are required or sufficient for neural function - how can the hierarchical, multi-scale organization of the brain be characterized formally, what are its functional implications
16	Hlinka, Jaroslav	EEG/fMRI data and modelling	13/6	19/6	Subject of interest/suggestions of topics to discuss: Modelling intrinsic brain activity ("resting state" brain phenomena: low-frequency fluctuations, functional connectivity patterns) Collective neural behaviour (spiking patterns) behind "EEG rhythms" - what details do we actually know and what do we need to include in models to capture the basis of intrinsic brain activity phenomena as captured in EEG/fMRI data? Does choice of node model matter in models of spontaneous large-scale activity?
17	Horwitz, Barry	The use of large-scale, neurobiologically realistic models to help understand functional neuroimaging data (both activations, and functional-effective connectivity analyses).	14/6	18/6	Importance of neuroimaging data for understanding human behavior, how these data were central in the development of network connectivity measures, how all this reinforced the importance of computational modeling. Recent work in our lab by Jason Smith on a network time-series analysis method that, we hope, will become useful to the neuroimaging community. to networks
18	Hugues, Etienne	Computacional Neuroscience	15/6		I will discuss a type of brain model which considers the coupling of local nodes by the large-scale connectivity, including conduction delays. At the node level, the model is based on the dynamics of a network of spiking neurons using the Fokker-Planck

					equation. This approach allows to keep details of the temporal dynamics, including oscillations. However, this work was limited to a neural mass. This work is in progress and I will present the first results, related to the resting state activity. I am interested to discuss the links with other existing approaches and on the possible ways to extend the present approach, in particular in the direction of neural fields.
19	Jirsa, Viktor	Neural Modeling	13/6	17/6	For biologically realistic large scale brain models, what is the best representation of a network node (neural mass, neural field)? How do EEG rhythms enter into these representations?
20	Knock, Stuart	EEG/fMRI modeling and data			
21	Kotter, Rolf	Connectivity	14/6	19/6	How to combine stimulus-driven activity and ongoing (resting) activity in the same model of the brain. The role of learning in mean-field models.
22	Lemieux, Louis	EEG/fMRI modeling and data	13/6	17/6	Biophysical fusion modeling and the role of noise in the models (and its meaning in neuroscience in general)
23	McIntosh, Randy	Connectivity	13/6	16/6	The role of noise in brain function, how to measure and how to model
24	Pflieger, Mark	EEG-fMRI modeling	14/6	19/6	Using functional models and information theoretic measures to mediate data-intensive (biostatistical) and model-intensive (biophysical) analyses; regionally tuned EEG/MEG source estimators; source space covariance statistics; conditional mutual information as a tool for effective connectivity analysis; event-related Volterra modeling; detection and estimation of regional BOLD-related EEG signals.
25	Pinto, David	Experimental Neuroscience			
26	Ritter, Petra	EEG-fMRI			Hierarchical models and its empirical validation by across scale multimodal measures.
27	Nunez, Paul	Neural Modeling	14/6	17/6	1. Some of the general anatomical and physiological brain features that appear important in producing observed

					dynamic behaviors, and by implication, cognition. 2. Quick (5 min) overview of the basic ideas behind local and global neocortical dynamic theories. 3. Review of some of the most robust dynamic behaviors observed at large scales with EEG. 4. Some common, widely circulated myths about EEG. 5. Some speculations about the hard problem of consciousness (PL Nunez, Brain, Mind, and the Structure of Reality, Oxford U Press, in press, 2009).
28	Robinson, Peter	Neural Modeling	14/6	19/6	Integrative Modeling Using Neural Field Theory
29	Roebroeck, Alard	Effective connectivity	14/6	19/6	1. The ways and uses of endowing models of effective connectivity with endogenous dynamics 2. Methods to extend effective connectivity models to consider large amounts of variables simultaneously
30	Shmuel, Amir	Experimental Neuroscience	16/6	19/6	
31	Starke, Jens	Neural Modeling	12/6	19/6	Analyzing the influence of the neural network topology on pattern formation
32	Suffczynski, Piotr	Neural Modeling			Integration of cellular properties into lumped model - is it possible and how to do it? Simulation neuron - glia interactions in lumped models - is it necessary and possible? Plasticity in lumped models - is it possible? What is the upper frequency limit of the output signal in lumped models?
33	Trenado, Carlos				
34	Trujillo-Barr29eto, Nelson	EEG/fMRI modeling and data			What are the relative advantages of local and global types of neural mass models and how can they be statistically estimated?
35	Uludag, Kamil	EEG/fMRI modeling and data	14/6	18/6	Physics and physiology of fMRI signal
36	Valdés-Sosa, Pedro A.	Connectivity			What is the type of stochastic modeling useful for the neural modeling to be linked with neruoimagin? What type of numerical and statistical methods must be developed in the near future to

					bridge the gap between Nueroimaging and modeling?
37	Wendling, Fabrice	Neural Modeling	14/6	19/6	Model-based interpretation of data (EEG, fMRI) recorded in epileptic patients Mean-field vs detailed models and across-scale approaches Structure and function in neuronal systems