

POSTER PRESENTATIONS

Thursday 6th September: odd number posters

Friday 7th September: even number posters

P1 COMBINING PARALLEL IMAGING WITH RF ENCODING: OPTIMAL SAMPLING STRATEGIES

R. G. Nunes, D. J. Larkman, P. Batchelor, D. Atkinson and J. V. Hajnal

P2 ELECTROMAGNETIC SIMULATION GUIDED DESIGN OF AN OPTIMISED SELF-RESONANT HTS RECEIVE COIL FOR 3T MRI

B. Hu, I. Volkov, N. Alford, C. Randell, P. Glover

P3 A MODULAR APPROACH TO MR COMPATIBLE ROBOTICS: PROSTATE BIOPSY ROBOT

Haytham Elhawary, Aleksandar Zivanovic, Marc Rea, Colin Besant, Donald McRobbie, Ian Young, Nandita de Souza, Brian Davies, Michael Lamperth

P4 INTRA- AND INTER-SCANNER VARIABILITY OF QUANTITATIVE T2 MAPPING AT 3.0T: A MULTIVENDOR STUDY

S Balamoody, J C Waterton, R Hodgson, D L Buckley, S Zhao, M Scott, C E Hutchinson

P5 REDUCTION OF Rician NOISE ON MAGNETIC RESONANCE IMAGES

Antonio De Stefano, Anne Davis

P6 PARALLEL TRANSMISSION (PTX): IMPROVED FIDELITY OF LOCALISED EXCITATION WITHOUT EXPLICIT K-SPACE UNDERSAMPLING

Tünde A. Szilágyi, David J. Larkman, Joseph V. Hajnal

P7 GETTING PAST THE PAIN BARRIER TOWARDS SUCCESSFUL WRIST IMAGING

Lada V. Krasnosselskaia, Anshul Rastogi, Nadeem Saeed, Jane S. Angwin, Michael H. Binks M, Neeteesha X. Newell, Peter C. Taylor, Jo V. Hajnal.

P8 THE EFFECT OF GREY LEVEL NORMALISATION AND REGION SIZE OF TEXTURE ANALYSIS OF MR IMAGES

Daniel Tozer and Paul Tofts

P9 IMPROVED ANALYSIS OF FUNCTIONAL STIMULATION BY OPTICAL SPECTROSCOPY

Martyn Paley, Mike Smith, Pamela Ohadike, Paul Griffiths, Elspeth Whitby

P10 COMPARISON OF RADIAL, ASYMMETRIC RADIAL AND QUARK TRAJECTORIES FOR PARTIAL FOURIER, SHORT TE IMAGING

Kuan Lee and Jim Wild

P11 SPATIAL EFFECTS IN THE LOCALIZED DETECTION OF COUPLED METABOLITES IN VIVO

Richard AE Edden and Peter B Barker

P12 KETAMINE REDUCES PREFRONTAL GLUTAMINE IN RATS REARED IN SOCIAL ISOLATION

Antonio Napolitano, Mirjam I. Schubert, M. Veronica Porkess, Kevin Fone, Dorothee P. Auer

P13 ACCUMULATION OF ^1H MRS VISIBLE LIPIDS IN RAT BRAIN GLIOMA CELLS DURING CELL DEATH INDUCED BY CISPLATIN.

Ladan Mirbahai, Martin Wilson, Neil Spencer, Carmel McConville, Andrew Peet, Risto A. Kauppinen

P14 APPLICATION OF INDEPENDENT COMPONENT ANALYSIS FOR FEATURE EXTRACTION AND BLIND SOURCE SEPARATION ON SYNTHESIZED BRAIN TUMOUR ^1H MAGNETIC RESONANCE SPECTRA

Jie Hao, Martin Wilson, Nigel Davis, Andrew Peet, Theodoros N. Arvanitis

P15 BREATH-HOLD IMPROVES IMAGE REGISTRATION OF HYPERPOLARIZED HELIUM-3 MRI TO X-RAY CT

Rob H. Ireland, Neil Woodhouse, Nigel Hoggard, James A. Swinscoe, Bernadette H. Foran, Matthew Q. Hatton, and Jim M. Wild

P16 PRESSURE MEASUREMENT FROM THE DIFFUSION COEFFICIENT OF ^3He GAS

Jim M Wild

P17 PRELIMINARY RESULTS WITH HYPERPOLARISED ^3He MRI AT 3T

Kevin Teh, Kevin J Cooper, Matthew Clemence Nicola de Zanche, Jim M Wild

P18 MAGNETIC RESONANCE IMAGING OF ABNORMALITIES IN DIARRHOEA-PREDOMINANT IRRITABLE BOWEL SYNDROME: FASTING AND AFTER A BRAN-CONTAINING MEAL

L. Marciani, S. Foley, C.L. Hoad, J.J. Totman, E. Campbell, E. Cox, R.C. Spiller and P.A. Gowland

P19 DEVELOPMENT OF A FLEXIBLE SOFTWARE PHANTOM GENERATOR FOR DCE-MR IMAGING OF ABDOMINAL TUMOURS

Anita Banerji, Giovanni A. Buonaccorsi, Geoff J.M. Parker

P20 CHARACTERISATION OF THE BLOOD FLOW RESPONSE TO AN ORAL GLUCOSE CHALLENGE TEST MEAL OF THE SUPERIOR MESENTERIC, AORTA AND INTERNAL CAROTID ARTERIES'

JJ Totman, L Marciani, S Foley, CL Hoad, E Campbell, Spiller RC, PA Gowland

P21 A NOVEL METHOD TO TACKLE DIFFICULTIES OF LIVER VOLUME AND MAJOR HEPATIC VESSEL TRUNK SEGMENTATIONS IN LAVA MRI DATASETS

Ying Chi, Peter Cashman, Fernando Bello, Richard Kitney

P22 *IN VIVO* MRS CHARACTERISATION OF ANIT-INDUCED HEPATOBIILIARY DYSFUNCTION

Bhavana Solanky, Gina Sanchez-Canon, Simon Taylor-Robinson, Jimmy Bell, Julie C Holder, Jane Cox, Po-Wah So

P23 QUANTITATIVE MT IMAGING IN A PRE-OPERATIVE EPILEPSY PATIENT WITH A CAVERNOUS HAEMANGIOMA AT 3.0T

R. S. Samson, M. R. Symms, M. Cercignani, M. Yogarajah, S. Eriksson, J. S. Duncan

P24 AUTOMATIC REGIONAL ANALYSIS OF QUANTITATIVE T₁ AND T₂ MAPPING IN THE BRAIN

B.S. Aribisala, J. He, P.E. Thelwall, K.G. Hollingsworth and A.M. Blamire

P25 USING GRADIENT ECHO-SPIN ECHO SEQUENCE TO MEASURE T₂ IN THE BRAIN AT 3T AND 7T.

Eleanor. F. Cox and Penny. A. Gowland

P26 POSTMORTEM HIGH FIELD MRI OF THE MIDBRAIN AT 9.4T: NORMAL ANATOMY AND QUALITATIVE COMPARISON WITH PROGRESSIVE SUPRANUCLEAR PALSY

MA Miranda, LA Massey, HG Parkes, Po-Wah So, T Revesz, J Holton, J Thorton, AJ Lees and T Yousry

P27 AUTONOMIC DYSFUNCTION IN PRIMARY BILIARY CIRRHOSIS (PBC) IS ASSOCIATED WITH STRUCTURAL BRAIN ABNORMALITIES, PARTICULARLY IN THE GLOBUS PALLIDUS.

K.G. Hollingsworth, A.M. El-Sharkawy, Z.U.D.A. Khan, A.M. Blamire, R. Taylor, D.E. Jones, J.L. Newton

P28 QUANTITATIVE DCE-MRI AS A SCREENING TOOL IN THE PRE-CLINICAL ASSESSMENT OF ANTI-VASCULAR AGENTS

Inna V. Linnik, Steve R. Williams, Karen E. Davies, Alan T. McGown, John A. Hadfield, David L. Buckley

P29 CHANGES IN T₂*, T₁ AND ASL PERFUSION ESTIMATES WITH CARBOGEN BREATHING AND DCE-MRI COMPARISONS IN A SUBCUTANEOUS RAT TUMOUR MODEL

John P. Carr, Jean Tessier, Daniel Bradley, David L. Buckley and Geoff J. M. Parker

P30 ABOUT “AXIAL” AND “RADIAL” DIFFUSIVITY

Claudia A.M. Wheeler-Kingshott and Mara Cercignani

P31 LOOKING FOR AN OPTIMAL DT-MRI ACQUISITION SCHEME: HOW MANY DIRECTIONS AND B-VALUES?

Marta M. CORREIA, Guy B. WILLIAMS

P32 PRINCIPAL EIGENVECTOR COHERENCE: DEPENDENCE ON B-VALUE RANGE IN DTI

Ai Wern Chung, Philip G. Batchelor, Chris A. Clark

P33 CORRECTING ARTIFACTS IN HIGH TEMPORAL- AND SPATIAL-RESOLUTION DYNAMIC ABDOMINAL STUDIES USING UNFOLD: A POTENTIAL TOOL FOR IMPROVING PERFUSION QUANTIFICATION OF DCE-MR INVESTIGATIONS

K Miyazaki, JA D'Arcy, D.Hawkes, D.Atkinson, MO Leach, DJ Collins

P34 RAPID BLOOD T₁ CALIBRATION FOR ARTERIAL SPIN LABELLING

Marta Varela, Joseph V. Hajnal, David J. Larkman

P35 DEFINITIONS OF ENHANCEMENT FOR DCE-MRI DRUG TRIALS

C. J. Rose, G. A. Buonaccorsi, S. Cheung, J. P. O'Connor, C. Roberts, Y. Watson, B. Whitcher, and G. J. Parker

P36 A COMPARATIVE STUDY OF DIFFERENT IMAGE ANALYSIS PACKAGES FOR THE PROCESSING OF fMRI DATA

Docherty C., Mueller K., Neumann J., Lepsien J., von Cramon D.Y., Turner R., Lohmann G

P37 SAFETY OF LOCALISING INTRACRANIAL EEG ELECTRODES USING MRI: A COMPARISON BETWEEN HEAD AND BODY COILS AT 3T

D. W. Carmichael, J. S. Thornton, P. J. Allen, and L. Lemieux

P38 EFFECTS OF THE TMS COIL ON MR IMAGE QUALITY IN COMBINED TMS/fMRI

Andreas Bungert and Richard Bowtell

P39 REPRODUCIBILITY OF BOLD AND PERFUSION DATA DURING VISUAL, MOTOR AND HYPERCAPNIA EXPERIMENTS AT 3T.

Jonathan A. Goodwin, Laura M. Parkes

P40 AN fMRI STUDY ON THE EFFECTS OF MIDAZOLAM SEDATION ON BRAIN ACTIVITY

C Alexakis, Q Siddiqui, A Diukova, C Steward, J Hlinka, J Hardman, D P Auer

P41 DEVELOPING A FUNCTIONAL PHANTOM FOR USE IN QUALITY CONTROL AND TESTING IMAGING SEQUENCES FOR fMRI

Lei Jiang, Ron Coxon, Penny Gowland, Richard Bowtell

P42 COMPARISON OF BOLD AND DIRECT-MR NEURONAL DETECTION (DND) USING BLOCK PARADIGM STIMULI.

L.S. Chow, Y. Fu, A. Dagens, G.G. Cook and M.N. Paley

P43 TASK SWITCHING AT 7 T: CORRELATION OF SINGLE TRIAL BOLD WITH SWITCH COST

P. J. Wright, N. Petridou, P. Liddle, P. Gowland, and S. Francis

P44 COMPARISON OF BOLD, GRAY MATTER NULLED AND VASO fMRI SIGNALS IN HUMAN VISUAL CORTEX

Yuji Shen and Risto Kauppinen

P45 FUNCTIONAL MAGNETIC RESONANCE IMAGING OF THE MOTOR NETWORK WITH 65ms TIME RESOLUTION

Z. Nagy, Chloe Hutton, N. Weiskopf, and R. Deichmann

P46 MAGNETIC RESONANCE IMAGING OF THE NEONATE – ULTRA FAST OR STANDARD IMAGING?

Elsbeth Whitby, Ruth Battye, Martyn Paley, Paul Griffiths, Daniel Connelly.

P47 FAT INFILTRATION IN DUCHENNE MUSCULAR DYSTROPHY: QUANTIFICATION ON T1-WEIGHTED IMAGES FOR STEROID-TREATED DMD BOYS AND CONTROL SUBJECTS

P. Garrod, K.G. Hollingsworth, P.E. Thelwall, D. Birchall, K. Bushby and V. Straub

P48 EVALUATION OF A FERROMAGNETIC OBJECT DETECTION SYSTEM FOR MRI PATIENT SCREENING

Gail Darwent, Ivy Weatherstone, Eugeny Krjukov, Martyn Paley

P49 WHEN SHOULD THE SNR BE MEASURED IN A MULTICENTRE STUDY? PRELIMINARY RESULTS FROM CALIBRAIN

Katherine Lymer, Elvina Gountouna, Iona Gerrish, Ian Marshall, Andrew McIntosh and Stephen Lawrie

P50 QUALITY ASSURANCE PROTOCOL FOR CALIBRAIN: MULTICENTRE STRUCTURAL AND FUNCTIONAL MRI IN SCOTLAND

Katherine Lymer, Elvina Gountouna, Ian Marshall, Gordon Waiter, David Brennan, Jonathan Best, Jonathan Cavanagh and Stephen Lawrie

P51 IMPACT OF INCONSISTENT RESOLUTION ON VBM STUDIES

João M. S. Pereira, Peter J. Nestor, Guy B. Williams

P52 INVESTIGATING THE MAGNETIC RESONANCE PROPERTIES OF TISSUE USING ETHANOL MRI AND MRS

Marc O'Brien, Dominick McIntyre, Madhu Basetti, Loreta Rodrigues, John Griffiths

P53 VENTRICULAR MASS INDEX MEASURED FROM MRI CORRELATES WITH PULMONARY ARTERY PRESSURE IN PATIENTS WITH SYSTEMIC SCLEROSIS AND SUSPECTED PULMONARY ARTERIAL HYPERTENSION

Dan Hagger, Neil Woodhouse, Charlie A Elliot, Iain Armstrong, Catherine Hill, Christine Davies, Jim M Wild, David G Kiely

P54 T1 MAPPING USING MP_RAGE SEQUENCE

O. Mougin and P. Gowland

P55 GENERAL SOLUTIONS FOR THE N-POOL BLOCH EQUATIONS

Penny L. Hubbard, David C. Williamson, Johanna Närväinen, Claire Cooke, Risto A. Kauppinen and Gareth A. Morris