

**DAY 1      Tuesday 2 September**

09:00-10:00    Registration & coffee

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**10:00            Session 1**

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10:00            Welcome – David Gadian

10:05-10:50    **Bill Moore Memorial Lecture**  
**Peter Styles, University of Oxford**

*“Memories of the MR Story – the British Chapter and Oxford Verse”*

10:50-11:05    **Submitted presentations**    “Emmerdale” - or High fields and horses:  
 High resolution imaging at 4.7T using four irregularly-shaped receiver coils  
*D Carmichael, N Chhina, M Cooper, E De Vita, C Randall, R Ordidge*

11:05-11:20    Application of MR imaging in the equine patient  
*RC Murray, SJ Dyson, MV Branch*

**11:20-11:45    Coffee**

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**11:45            Session 2 – Image and spectrum processing/analysis**

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11:45-12:00    Correcting object motion in fixed coils  
*D Atkinson, DJ Larkman, PG Batchelor, DLG Hill, JV Hajnal*

12:00-12:15    Initial investigation of Padé methods for the enhanced reconstruction of MR data  
*MF Callaghan, DJ Larkman, MC Wiltshire, JV Hajnal*

12:15-12:30    Assessment of the Pade approximant for quantifying <sup>1</sup>H MR spectroscopy data  
*DC Williamson, NA Thacker, SR Williams*

12:30-12:45    Improvement of registration method for longitudinal structural MRI analysis of brain atrophy in neurodegenerative disease  
*IB Cena, R Boyes, G Brown, E Lewis, J Schott, N Fox*

12:45-13:00    Simulations of the BOLD effect using a realistic model of the vasculature  
*JP Marques, R Bowtell*

**13:00-14:00    Lunch**

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| <b>14:00</b> | <b>Session 3 - Human brain imaging and spectroscopy</b>  |
| 14:00-14:15  | Quantification of bolus-tracking MRI data using Tikhonov regularization<br><i>F Calamante, DG Gadian, A Connelly</i>   |
| 14:15-14:30  | Correction of errors caused by eddy currents in diffusion tensor imaging with EPI<br><i>Y Shen, S Counsell, D Larkman, M Rutherford, O Kapellou, J Allsop, D Edwards, J Hajnal</i>                     |
| 14:30-14:45  | The potential of diffusion tensor tractography for neurosurgical planning of brain tumours<br><i>CA Clark TR Barrick, MM Murphy, BA Bell</i>   |
| 14:45-15:00  | Diffusion weighted imaging and perinatal brain injury<br><i>M Rutherford, S Counsell, J Allsop, J Boardman, O Kapellou, F Cowan, Y Shen, J Hajnal</i>  |
| 15:00-15:15  | White matter abnormalities in sickle cell disease detected using voxel-based morphometry (VBM)<br><i>T Baldeweg, A Hogan, F Kirkham, D Saunders, F Vargha-Khadem, D Gadian</i>                         |
| 15:15-15:30  | Glutamate dependent plasticity in human motor cortex following repetitive cortical stimulation demonstrated by 1H MRS<br><i>K Davies, S Williams, D Gow, J Rothwell, A Hobson, D Thompson, S Hamdy</i> |
| <b>15:30</b> | <b>Session 4 - Posters and Guest Lecture</b>   |
| 15:30-1700   | Tea and poster session   |
| 17:00-1800   | <b>Guest Lecture</b><br><b>Alex Pines, Department of Chemistry, University of California, Berkeley, USA</b><br><i>“NMR and MRI at a Distance”</i>  |
| <b>19:00</b> | <b>Boat departs from Temple Pier</b>   |

**DAY 2      Wednesday 3 September**

| <b>09:30      Session 5 - Contrast Agent Sequences</b>    |  |
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| 09:30-10:15   | <b>Kevin Brindle, Department of Biochemistry, University of Cambridge</b><br><i>“Novel Contrast Agents and their Biomedical Applications”</i>  |
| 10:15-10:30   | An evaluation of the use of UFLARE for rapid acquisition of B <sub>0</sub> field maps for undistortion of EPI<br><i>M Cercignani, M Symms, P Boulby, G Barker</i>  |
| 10:30-10:45   | TWIST; improving EPI image quality by a reduction of the effective readout time<br><i>E De Vita, D Thomas, D Carmichael, R Turner, R Ordidge</i>   |
| 10:45-11:00   | Multislice high resolution fMRI using zoom techniques with interleaved EPI<br><i>W van der Zwaag, S Francis, R Bowtell</i>   |
| 11:00-11:15   | Direct detection of rapidly fluctuating magnetic fields using fast MR spectroscopy and 2D localized strip-MAMBA<br><i>M Paley, K Lee, G Cooke, LS Chow, J Wild, S FICHELE, A Wilkinson, E van Beek, G Darwent, P Griffiths, E Whitby</i> |
| <b>11:15-11:45</b>  | <b>Coffee</b>  |
| <b>11:45      Session 6 - Body and musculoskeletal MR</b> |  |
| 11:45-12:00   | Intravoxel incoherent motion imaging in locally advanced rectal tumours<br><i>C Domenig, ASK Dzik-Jurasz, MO Leach, SJ Doran</i>   |
| 12:00-12:15   | Assessment of minimal preparation techniques for MR colonography<br><i>V Jardine, E Sala, J Pinney, J Skinner, DJ Lomas</i>  |
| 12:15-12:30   | Interactive MRCP with adaptive averaging<br><i>LE Kershaw, RT Black, MJ Graves, DJ Lomas</i>   |
| 12:30-12:45   | Impact of intragastric acid stability of fat emulsions on satiety and gastric emptying<br><i>L Marciani, D Bush, M Wickham, B Pick, J Wright, R Faulks, A Fillery Travis, RC Spiller, PA Gowland</i>                                     |
| 12:45-13:00   | Imaging of human bone in vivo using ultrashort TE (UTE): <sup>31</sup> P and <sup>1</sup> H<br><i>MD Robson, ILH Reichert, PD Gatehouse, T He, KE Chappell, J Holmes, S Girgis, GM Bydder</i>  |
| <b>13:00-14:00</b>  | <b>Lunch</b>   |

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| <b>14:00</b>       | <b>Session 7 - Cardiac and vascular</b>   |
| 14:00-14:45        | <b>Philip Kilner, Cardiovascular Magnetic Resonance Unit, Royal Brompton Hospital</b><br><i>“Cardiovascular Forms and Flows”</i>  |
| 14:45-15:00        | Renal perfusion and function in patients with atherosclerotic renovascular disease<br><i>DL Buckley, AE Shurrah, JE Kilgallon, AP Jones, H Mamtara, PA Kalra</i>                                  |
| 15:00-15:15        | Vena cava contrast enhanced MR venography: experience of 52 consecutive cases<br><i>J Lin, K-R Zhou, Z-W Chen, J-H Wang, Z-P Yan, Y-XJ Wang</i>   |
| 15:15-15:30        | WHHL rabbit aorta atherosclerosis progression characteristics observed by gradient echo MRI<br><i>Y-X Wang, H Kuribayashi, J Tessier, M Wågberg, D Checkley, R Fritsche-Danielson, J Waterton</i> |
| 15:30-15:45        | Studies of pulsatile flow in models of the human carotid bifurcation<br><i>I Marshall, P Papathanasopoulou</i>  |
| <b>15:45-16:15</b> | <b>Tea</b>  |
| <b>16:15</b>       | <b>Session 8 - Experimental Models</b>  |
| 16:15-16:30        | fMRI response to direct cortical stimulation under different anaesthetics in the rat<br><i>V Austin, A Blamire, P Styles, P Matthews, N Sibson</i>  |
| 16:30-16:45        | Serial <i>in vivo</i> magnetic resonance imaging of stroke-induced transhemispheric neural stem cell migration<br><i>M Modo, K Mellodew, D Cash, SE Fraser, TJ Meade, J Price, SCR Williams</i>   |
| 16:45-17:00        | Characterisation of vascular territories using arterial spin labelling<br><i>MF Lythgoe, DL Thomas, L van der Weerd, DG Gadian</i>  |
| 17:00-17:15        | In vivo, in vitro and HRMAS NMR spectroscopy study of apoptosis<br><i>JL Griffin, PK Valonen, KK Lehtimäki, OHJ Grön, MI Kettunen, S Ylä-Herttua, J Nicholson, RA Kauppinen</i>                   |
| 17:15-17:30        | Endothelin-1-mediated decrease in cerebral blood volume alters the ADC, T <sub>1</sub> and MTR of rat brain<br><i>NR Sibson, JP Lowe, AM Blamire, P Styles, DC Anthony</i>                        |
| <b>17:30</b>       | <b>End of meeting</b>   |