

Schedule for SEAS DTC Conference, 7/8 July 2009

Day 1 - Tuesday 7 July 2009

Time	Kilsyth Stream	
08:00	Strathblane Hall : Registration / Cromdale Hall : Coffee / Tea / Exhibition [Sponsored by Roke Manor Research]	
09:10	Pentland Auditorium : Combined Welcome Session with EMRS DTC Keynote address : Dr Chris Mace (MoD Director General Science and Technology - Operations)	
10:10	Brief break	
10:15	Pentland Auditorium : Plenary Session 1 : SEAS DTC Introduction	
10:45	Cromdale Hall : Coffee / Tea / Exhibition [Sponsored by Roke Manor Research]	
11:10	Kilsyth : Session chair Stuart Farquhar (Dstl)	Communications and Control theme session, part 1 <ul style="list-style-type: none"> • Theme introduction • Theme papers: <ul style="list-style-type: none"> - Architecture development for remote presence (Chris Sotzing, Heriot Watt University) - Self managed mobile cells (Eskindir Asmare, Imperial College) - Robust application-layer Knowledge Exchange (Andrew Smith, Imperial College) - Development and virtual network demonstration of future communication architecture (Andrew Dunlop, Roke)
12:50	Cromdale Hall : Lunch Break [Sponsored by the Aerospace and Defence Knowledge Transfer Network]	
13:35	Pentland Auditorium : Plenary Session 2 : SEAS DTC Integrated Demonstrations	
14:15	Cromdale Hall : Coffee / Tea / Exhibition [Sponsored by Roke Manor Research]	
14:30	Kilsyth : Session chair Paul Webb (Roke)	Communications and Control theme session, part 2 <ul style="list-style-type: none"> • Session introduction: • Theme papers: <ul style="list-style-type: none"> - Passive urban surveillance using signals of opportunity: demonstrator build (Robert Whitehouse, Roke) - Video streaming (Vince Dobbin, Wireless Fibre Systems) - Emergency through-ground mobile communications system (Vince Dobbin, Wireless Fibre Systems) - Factors affecting surface wave propagation (Janice Hendry, Roke) - Verification of multi-carrier modulation scheme for shallow water acoustic communication (John Domokos, Roke) • Mini-thread demonstrator updates: <ul style="list-style-type: none"> - Integration demonstrator for theme control projects (Tom Richardson, University of Bristol) - Integration demonstrator for theme communication projects (Andrew Dunlop, Roke)
16:20	Cromdale Hall : Networking Reception (up to 1900) [Sponsored by BAE Systems] Followed by Conference Dinner [Sponsored by SELEX Galileo]	

Day 2 - Wednesday 8 July 2009

Time	Kilsyth Stream	
08:45	Kilsyth : Session chair John Liddicoat (Dstl)	Sensor Exploitation theme session, part 1 <ul style="list-style-type: none"> • Theme introduction • Underpinning research: <ul style="list-style-type: none"> - Efficient representation of multi-view data (Pier-Luigi Dragotti, Imperial College) - Novel statistical approaches to the quantitative combination of multiple edge detectors (Tania Stathaki, Imperial College) - Exchanging multi-level maps (Tom Cooper, QinetiQ) - Distributed knowledge (Michael Outhouse, Deep Vision)
10:00	Cromdale Hall : Coffee / Tea / Exhibition [Sponsored by MBDA UK]	
10:25	Pentland Auditorium : Plenary Session 3 : DTC Programme - Lessons Learned & Future	
11:05	Brief break	
11:10	Kilsyth : Session chair John Liddicoat (Dstl)	Sensor Exploitation theme session, part 2 <ul style="list-style-type: none"> • Session introduction • 'TIGER' mini-thread contributions: <ul style="list-style-type: none"> - Robust phase correlation methods for sub-pixel feature matching (Jian Guo Liu, Imperial College) - Distributed knowledge (Michael Outhouse, Deep Vision) - Image volume registration (Darren Myatt, Waterfall Solutions) - Exchanging multi-level maps (Tom Cooper, QinetiQ)
12:25	Cromdale Hall : Lunch Break [Sponsored by the Aerospace and Defence Knowledge Transfer Network]	
13:10	Kilsyth : Session chair John Liddicoat (Dstl)	Sensor Exploitation theme session, part 3 <ul style="list-style-type: none"> • Session introduction • Demonstrations - chosen from: <ul style="list-style-type: none"> - Real-time monitoring of crowded unstructured video footage (Nick Carter, BAE Systems) - STARTLE - cued threat detection (Mike Hook, Roke) - Phase correlation methods (Jian Guo Liu, Imperial College) - Object recognition (Michael Outhouse, Deep Vision) - Image volume registration (Darren Myatt, Waterfall Solutions) - Dynamic, cost-directed reconfiguration of multi-platform sensor architectures (Kevin Hammond, St Andrews University) • Discussion and further demonstration with researchers post-session
14:00	Cromdale Hall : Coffee / Tea / Exhibition [Sponsored by MBDA UK]	
14:15	Strathblane Hall : Plenary Session 4 : Demonstrations	
16:00	Cromdale Hall : Coffee / Tea / Networking [Sponsored by MBDA UK]	

Schedule for SEAS DTC Conference, 7/8 July 2009

Day 1 - Tuesday 7 July 2009

Time	Moorfoot Stream	
08:00	Strathblane Hall : Registration / Cromdale Hall : Coffee / Tea / Exhibition [Sponsored by Roke Manor Research]	
09:10	Pentland Auditorium : Combined Welcome Session with EMRS DTC Keynote address : Dr Chris Mace (MoD Director General Science and Technology - Operations)	
10:10	Brief break	
10:15	Pentland Auditorium : Plenary Session 1 : SEAS DTC Introduction	
10:45	Cromdale Hall : Coffee / Tea / Exhibition [Sponsored by Roke Manor Research]	
11:10	<p style="color: blue;">Moorfoot :</p> <p>Session chair Bharat Patel (Dstl)</p>	<p>Systems Engineering research theme session, part 1</p> <ul style="list-style-type: none"> • Theme introduction • Theme papers: <ul style="list-style-type: none"> – A case study in goal-driven architectural adaptation (Will Heaven, Imperial College) – Dynamic, cost-directed reconfiguration of multi-platform sensor architectures (Kevin Hammond, St Andrews University / Matthew Bolsover, Waterfall Solutions) – Trusted reasoning engine for autonomous systems with an interactive demonstrator (Hannu Rajaniemi, ThinkTank Maths) – Measuring Emergence in Cooperative Autonomy (Ingrida Valiusaityte, BAE Systems)
12:50	Cromdale Hall : Lunch Break [Sponsored by the Aerospace and Defence Knowledge Transfer Network]	
13:35	Pentland Auditorium : Plenary Session 2 : SEAS DTC Integrated Demonstrations	
14:15	Cromdale Hall : Coffee / Tea / Exhibition [Sponsored by Roke Manor Research]	
14:30	<p style="color: blue;">Moorfoot :</p> <p>Session chair Graham Watson (BAE Systems SEIC)</p>	<p>Systems Engineering research theme session, part 2</p> <ul style="list-style-type: none"> • Session introduction • Theme papers: <ul style="list-style-type: none"> – The evaluation of cultural factors and their potential effects on military operations (Carys Siemieniuch, Loughborough University) – Deriving safety requirements for autonomous systems (Rob Alexander, University of York) – Modular assessment framework for autonomous systems using novel architectural representations (Glenn Callow, BAE Systems) – Decision maker evaluation framework (Gareth Rees, MBDA UK)
16:20	Cromdale Hall : Networking Reception (up to 1900) [Sponsored by BAE Systems] Followed by Conference Dinner [Sponsored by SELEX Galileo]	

Day 2 - Wednesday 8 July 2009

Time	Moorfoot Stream	
08:45	<p style="color: blue;">Moorfoot</p>	<p>MoD Technology Management Workshop (Led by John Yeaman, MoD DE&S PTG)</p>
10:00	Cromdale Hall : Coffee / Tea / Exhibition [Sponsored by MBDA UK]	
10:25	Pentland Auditorium : Plenary Session 3 : DTC Programme - Lessons Learned & Future	
11:05	Brief break	
11:10	<p style="color: blue;">Moorfoot :</p> <p>Session chair Henry Tse (BAE Systems)</p>	<p>Mission Planning & Decision-making theme session part 1</p> <ul style="list-style-type: none"> • Theme introduction • Theme papers: <ul style="list-style-type: none"> – Asset allocation and routing, with games and repair, under uncertainty (Berc Rustem, Imperial College) – Understanding the impact of machine technologies on human team cognition (Jo Thoms, BAE Systems)
12:25	Cromdale Hall : Lunch Break [Sponsored by the Aerospace and Defence Knowledge Transfer Network]	
13:10	<p style="color: blue;">Moorfoot :</p> <p>Session chair Bob Taylor (Dstl)</p>	<p>Mission Planning & Decision-making theme session part 2</p> <ul style="list-style-type: none"> • Session introduction • Theme papers: <ul style="list-style-type: none"> – Collaborative mechanism to manage large groups of autonomous systems (Rachid Hourizi, University of Bath) – Modelling team coordination in multi-agent planning (Nalan Gulpinar, University of Warwick)
14:00	Cromdale Hall : Coffee / Tea / Exhibition [Sponsored by MBDA UK]	
14:15	Strathblane Hall : Plenary Session 4 : Demonstrations	
16:00	Cromdale Hall : Coffee / Tea / Networking [Sponsored by MBDA UK]	

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08:00	Strathblane Hall : Registration / Cromdale Hall : Coffee / Tea / Exhibition [Sponsored by Roke Manor Research]	
09:10	Pentland Auditorium : Combined Welcome Session with EMRS DTC Keynote address : Dr Chris Mace (MoD Director General Science and Technology - Operations)	
10:10	Brief break	
10:15	Pentland Auditorium : Plenary Session 1 : SEAS DTC Introduction	
10:45	Cromdale Hall : Coffee / Tea / Exhibition [Sponsored by Roke Manor Research]	
11:10	Tinto : Session chair Steve Hodder (Dstl)	Propulsion, Power Generation and Energy Management theme session, part 1 <ul style="list-style-type: none"> • Theme introduction • Theme papers: <ul style="list-style-type: none"> - A scoping study into advanced materials for morphing UAV wing structures (Lorenzo Iannucci, Imperial College) - Very long duration propulsion systems - Phase 2 (Mark Husband, Rolls-Royce) - Ultra-compact intelligent electrical networks - Phase 2 (Armin Stranjak, Rolls-Royce / Mike Hook, Roke) - Investigation into the Interaction between Automatic and Autonomous Systems (Mike Hook, Roke)
12:50	Cromdale Hall : Lunch Break [Sponsored by the Aerospace and Defence Knowledge Transfer Network]	
13:35	Pentland Auditorium : Plenary Session 2 : SEAS DTC Integrated Demonstrations	
14:15	Cromdale Hall : Coffee / Tea / Exhibition [Sponsored by Roke Manor Research]	
14:30	Tinto : Session chair Dave Morgan (Rolls-Royce)	Propulsion, Power Generation and Energy Management theme session, part 2 <ul style="list-style-type: none"> • Session introduction • Intelligent Power Management papers: <ul style="list-style-type: none"> - Introduction (Martin Johnston, Rolls-Royce) - Requirements Study into Intelligent Power Management (Ben Morley, BAE Systems) - Intelligent Power Management for Autonomous UAV Systems (John Economou, Cranfield University) - Assessing the Benefits of Intelligent Power Management for Autonomous Vehicles (Andrew Gardner, QinetiQ) - Architectures for Vehicle Power Management (Mike Hook, Roke)
16:20	Cromdale Hall : Networking Reception (up to 1900) [Sponsored by BAE Systems] Followed by Conference Dinner [Sponsored by SELEX Galileo]	

Day 2 - Wednesday 8 July 2009

Time	Tinto Stream	
08:45	Tinto : Session chair Graham Sharples (Dstl)	Algorithms and Architectures theme session, part 1 <ul style="list-style-type: none"> • Theme introduction • Theme papers: <ul style="list-style-type: none"> - An Approach to Spatio-Temporally Consistent Scene Classification in Urban Workspaces: An Overview (Ingmar Posner, P. Newman University of Oxford) - Towards Driveable Terrain Detection with Uncertain Terrain Geometry Estimates (Richard Brimble, BAE Systems, Advanced Technology Centre) - Evaluating cognitive architectures for collision avoidance on commercial robots (Adam Collins, BAE Systems, Advanced Technology Centre)
10:00	Cromdale Hall : Coffee / Tea / Exhibition [Sponsored by MBDA UK]	
10:25	Pentland Auditorium : Plenary Session 3 : DTC Programme - Lessons Learned & Future	
11:05	Brief break	
11:10	Tinto : Session chair Graham Sharples (Dstl)	Algorithms and Architectures theme session, part 2 <ul style="list-style-type: none"> • Session introduction • Theme papers: <ul style="list-style-type: none"> - Relative SLAM (Gabe Sibley, P. Newman, University of Oxford) - SLAM with a Heterogeneous Prior Map (Simon Julier, University College London) - Towards a Taxonomy of Performance Metrics, Bounds and Tests for Tracking and SLAM Algorithms (James Revell, BAE Systems, Advanced Technology Centre)
12:25	Cromdale Hall : Lunch Break [Sponsored by the Aerospace and Defence Knowledge Transfer Network]	
13:10	Tinto : Session chair Hector Figueiredo (BAE Systems)	Algorithms and Architectures theme session, part 3 <ul style="list-style-type: none"> • Session introduction • Theme presentations: <ul style="list-style-type: none"> - Efficient Planning for Adaptive Navigation (Arthur Richards, University of Bristol) - Control and Management of Autonomous Mobile Sensors using the Max-Sum Algorithm (Alex Rogers, University of Southampton)
14:00	Cromdale Hall : Coffee / Tea / Exhibition [Sponsored by MBDA UK]	
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