

Schedule for SEAS DTC Conference, 24/25 June 2008

Day 1 - Tuesday 24 June 2008

Time	Kilsyth Stream	
08:00	Strathblane Hall : Registration / Cromdale Hall : Coffee	
09:10	Pentland Auditorium : Combined Welcome Session with EMRS DTC Keynote address : Dr Chris Mace (MoD Director General Science and Technology - Operations)	
10:15	Brief break	
10:20	Pentland Auditorium : Plenary Session 1 : SEAS DTC Introduction	
10:50	Cromdale Hall : Coffee / Tea / Exhibition	
11:15	Kilsyth : Session chair John Liddicoat (Dstl)	Sensor Exploitation theme session, part 1, covering : <ul style="list-style-type: none"> • Introduction • Theme plenary • Mini-thread #1 : Information from Imagery <ul style="list-style-type: none"> - Compound phase correlation for multiple motion decomposition in target extraction and DEM generation (Jianguo Liu, Imperial College) - Symmetry detection using frequency domain motion estimation techniques (Georgios Tzimiropoulos, Imperial College) - An abstraction-based model of object classification (Michael Outhouse, Deep Vision) - Unsupervised representation and understanding of multi-view images (Pier-Luigi Dragotti, Imperial College)
12:45	Cromdale Hall : Lunch Break / Exhibition	
13:30	Pentland Auditorium : Plenary Session 2 : SEAS DTC Systems Engineering	
14:30	Cromdale Hall : Coffee / Tea / Exhibition	
14:55	Kilsyth : Session chair Neil Short (SELEX Galileo)	Sensor Exploitation theme session, part 2, covering : <ul style="list-style-type: none"> • Introduction • Mini-thread #2 : Spatial Representation in Complex Environments <ul style="list-style-type: none"> - Exchanging multi-level maps (Simon Maskell, QinetiQ) - Image volume registration (Jeremy Rogers, Waterfall Solutions) - Automatically predicting resource usage bounds for AV software (Kevin Hammond, St Andrews University) • Bio-cognition special interest group <ul style="list-style-type: none"> - STARTLE: A biologically-inspired architecture for cued detection (Mike Hook, Roke) • Questions, summary and post-session demonstrations in Kilsyth Room
16:10	Cromdale Hall : Networking Reception (up to 1900)	

Day 2 - Wednesday 25 June 2008

Time	Kilsyth Stream	
09:00	Kilsyth : Session chair Paul Webb (Roke Manor Research)	Communications and Control theme session, part 1 - robust communications mini-thread : <ul style="list-style-type: none"> • Introduction (Paul Webb, Roke) • Dynamic communications management for autonomous vehicles (Andrew McCabe, BAE Systems ATC) • Resilient distributed control in hostile communications environments (Derek Long, Roke) • Robust application-layer data exchange protocols for networks of semi-autonomous vehicles (Andrew Smith, Imperial College London)
10:00	Cromdale Hall : Coffee / Tea / Exhibition	
10:25	Pentland Auditorium : Plenary Session 3 : Development of DTC Programme	
11:25	Kilsyth : Session chair Stuart Farquhar (Dstl)	Communications and Control theme session, part 2 - control mini-thread : <ul style="list-style-type: none"> • Introduction (Stuart Farquhar, Dstl) • Intimate control for collaborative systems phase 2: refined analysis (Keith Markham, MBDA) • Distributed self-management framework for unmanned autonomous vehicles (Eskindir Asmare, Imperial College London) • Auto-landing (Ed Sparks, Roke)
12:25	Cromdale Hall : Lunch Break	
13:10	Kilsyth : Session chair Paul Webb (Roke Manor Research)	Communications and Control theme session, part 3 - bearer technologies mini-thread: <ul style="list-style-type: none"> • Introduction (Paul Webb, Roke) • Surface wave communications (Janice Hendry, Roke) • A transmit / receive module for underwater RF communications (Alex Ballantyne, Wireless Fibre Systems) • Improvements over the OFDM modulation for shallow water acoustic communications (John Domokos, Roke) • Passive urban surveillance using signals of opportunity (Robert Whitehouse, Roke)
14:00	Cromdale Hall : Coffee / Tea / Exhibition	
14:15	Strathblane Hall : Plenary Session 4 : Demonstrations	
16:00	Cromdale Hall : Coffee / Tea / Networking	

Schedule for SEAS DTC Conference, 24/25 June 2008

Day 1 - Tuesday 24 June 2008

Time	Moorfoot Stream	
08:00	Strathblane Hall : Registration / Cromdale Hall : Coffee	
09:10	Pentland Auditorium : Combined Welcome Session with EMRS DTC Keynote address : Dr Chris Mace (MoD Director General Science and Technology - Operations)	
10:15	Brief break	
10:20	Pentland Auditorium : Plenary Session 1 : SEAS DTC Introduction	
10:50	Cromdale Hall : Coffee / Tea / Exhibition	
11:15	Moorfoot : Session chair Bob Taylor (Dstl)	Mission Planning and Decision-Making theme session, part 1, covering : <ul style="list-style-type: none"> • Theme overview (Jo Thoms, BAE Systems Insyte) • Mini-thread: Deliberation <ul style="list-style-type: none"> - Sequential updating of decisions and games/plans under uncertainty (Berc Rustem, Imperial College) - Integrated task assignment and routing under uncertainty (Berc Rustem, Imperial College)
12:45	Cromdale Hall : Lunch Break / Exhibition	
13:30	Pentland Auditorium : Plenary Session 2 : SEAS DTC Systems Engineering	
14:30	Cromdale Hall : Coffee / Tea / Exhibition	
14:55	Moorfoot : Session chair Jo Thoms (BAE Systems Insyte)	Mission Planning and Decision-Making theme session, part 2, covering : <ul style="list-style-type: none"> • Mini-thread: Teamwork <ul style="list-style-type: none"> - Intentionality in human-machine interaction: challenges for human factors (Peter Goodison, University of Bath) - Towards autonomous systems that collaborate (Rachid Hourizi, University of Bath) - Autonomy and us – using psychological principles to inform autonomous system design (Tim Harrison, University of Bath)
16:10	Cromdale Hall : Networking Reception (up to 1900)	

Day 2 - Wednesday 25 June 2008

Time	Moorfoot Stream	
09:00	Moorfoot : Session chair Bill Bardo (DTC Technical Director)	Session on linkages with related research programmes : <ul style="list-style-type: none"> • DTC links and areas of common interest (Bill Bardo) • Guest presentations from other programmes: <ul style="list-style-type: none"> - FLAVIIR (Phil John, Cranfield University) - NECTISE (Dave Gunton, BAE Systems ATC) - ALADDIN (Alex Rogers, University of Southampton) - SSEI (John McDermid, University of York)
10:00	Cromdale Hall : Coffee / Tea / Exhibition	
10:25	Pentland Auditorium : Plenary Session 3 : Development of DTC Programme	
11:25	Moorfoot : Session chair Bharat Patel (Dstl)	Systems Engineering research theme session part 1, covering : <ul style="list-style-type: none"> • Introduction to the theme and links to other themes (Graham Watson, BAE Systems - Systems Engineering Innovation Centre) • Safety critical autonomy (Chris Deeks, BAE Systems ATC) • Goal-driven adaptable software architecture for UAVs (Will Heaven, Imperial College)
12:25	Cromdale Hall : Lunch Break	
13:10	Moorfoot : Session chair Graham Watson (BAE Systems SEIC)	Systems Engineering research theme session part 2, covering : <ul style="list-style-type: none"> • Engineering Autonomous System Architectures (Glenn Callow, BAE Systems ATC) • Certification Objectives for Autonomous Systems (Rob Alexander, University of York) • Underpinning mathematics Special Interest Group (Graham Watson, BAE Systems - SEIC / Paul Kimber, SELEX Galileo) • Hybrid methods for Bayesian inference (Hannu Rajaniemi, ThinkTank Mathematics)
14:00	Cromdale Hall : Coffee / Tea / Exhibition	
14:15	Strathblane Hall : Plenary Session 4 : Demonstrations	
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Day 1 - Tuesday 24 June 2008

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09:10	Pentland Auditorium : Combined Welcome Session with EMRS DTC Keynote address : Dr Chris Mace (MoD Director General Science and Technology - Operations)	
10:15	Brief break	
10:20	Pentland Auditorium : Plenary Session 1 : SEAS DTC Introduction	
10:50	Cromdale Hall : Coffee / Tea / Exhibition	
11:15	Tinto : Session chair Hector Figueiredo (BAE Systems)	Algorithms and Architectures theme session, part 1, covering : <ul style="list-style-type: none"> • Introduction (Hector Figueiredo, BAE Systems ATC) • Adaptive mission planning - the embedded OODA loop (Pedro Patrón, Heriot-Watt University) • Adaptive navigation in uncertain urban environments (Arthur Richards, Bristol University) • Appearance-based mapping and navigation in urban environments (Derik Schröter, Oxford University) • Visual exploration of buildings (Estelle Tidey, Roke) • Performance models for SLAM (James Revell, BAE Systems ATC)
12:45	Cromdale Hall : Lunch Break / Exhibition	
13:30	Pentland Auditorium : Plenary Session 2 : SEAS DTC Systems Engineering	
14:30	Cromdale Hall : Coffee / Tea / Exhibition	
14:55	Tinto : Session chair Graham Sharples (Dstl)	Algorithms and Architectures theme session, part 2, covering : <ul style="list-style-type: none"> • Reactive data gathering (Chris Lloyd, BAE Systems ATC) • Cooperative control using the max-sum algorithm (Antony Waldoock, BAE Systems ATC) • Improving the coordination efficiency of multiple AUV operations using prediction of intent (Chris Sotzing, Heriot-Watt University) • Vision based target tracking (Chris Jones, Bristol University)
16:10	Cromdale Hall : Networking Reception (up to 1900)	

Day 2 - Wednesday 25 June 2008

Time	Tinto Stream	
09:00	Tinto : Session chair Dave Morgan (Rolls-Royce)	Propulsion, Power Generation and Energy Management theme session part 1, covering : <ul style="list-style-type: none"> • Introduction (Dave Morgan, Rolls-Royce) • Very long endurance propulsion systems (Ben Palethorpe, Rolls-Royce) • Fuel cell power for autonomous systems (Qiong Cai, Imperial College)
10:00	Cromdale Hall : Coffee / Tea / Exhibition	
10:25	Pentland Auditorium : Plenary Session 3 : Development of DTC Programme	
11:25	Tinto : Session chair Mick Gillman (Dstl)	Propulsion, Power Generation and Energy Management theme session part 2, covering : <ul style="list-style-type: none"> • Introduction (Dave Morgan, Rolls-Royce) • Predictive traction power systems management for autonomous vehicles (Paul Jeary, MIRA) • Ultra-compact intelligent electrical networks (Steve Long, Rolls-Royce)
12:25	Cromdale Hall : Lunch Break	
13:10	Tinto : Session chair Dave Morgan (Rolls-Royce)	Propulsion, Power Generation and Energy Management theme session part 3, covering : <ul style="list-style-type: none"> • Introduction (Dave Morgan, Rolls-Royce) • Autonomous soaring phase 2 (Rod Irvine, MBDA / Mike Hook, Roke) • Power management (Martin Johnson, Rolls-Royce)
14:00	Cromdale Hall : Coffee / Tea / Exhibition	
14:15	Strathblane Hall : Plenary Session 4 : Demonstrations	
16:00	Cromdale Hall : Coffee / Tea / Networking	