

Agenda – MIMO and Radar Signal Processing

Summary of the event

This UDRC Themed meeting will investigate the challenges that advanced Radar systems can bring to signal processing. As the requirements of the Networked Battlespace include the capability to provide more reliable and precise information about observed targets and scenes, challenges on the design and exploitation of advanced radar concepts and applications arise. MIMO and Distributed radar represent a viable answer to these requirements, however intrinsic challenges still need to be addressed for these advanced systems. Interoperability, information fusion and processing requirements are some of the issues requiring the effort of the signal processing community to address them.

This meeting will explore challenges and some advances in MIMO and Radar Signal Processing that are on going through the UDRC. It will also be an opportunity for the radar signal processing community to identify synergies, share experiences and views, and to understand Dstl challenges in this important area.

Timings

Friday 29th May 2015 9am till 5pm

Location

Room R2.15, Royal College Building, University of Strathclyde, 204 George Street, Glasgow G1 1XW. The Royal College Building, is near Queen Street Station in the centre of Glasgow. (*To find Room 2.15, enter by the Main Door on George Street, walk up to the next level, turn right and R2.15 is at the end of the corridor on the right. Alternatively enter from the side door on Montrose Street and R2.15 is first door on the left).*

A map of the campus can be found at

http://www.strath.ac.uk/maps/royalcollegebuilding/

Link to Glasgow City Centre Map

http://www.strath.ac.uk/visiting/gettingtostrathclyde/

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Friday, May 29, 2015	
8:30 am to 9:00 am	Coffee and Registration
9:00 am to 9:05 am	Introduction Prof John Soraghan
9:05 am to 9.45am	"MIMO Radar: Theory and Experimentation" Prof Chris Baker, Ohio State University
9.45 am to 10.25am	"Radar and MIMO Signal Processing Challenges" Prof Antonio De Maio, University of Naples
10:25 am to 10.50 am	Coffee
10.50 am to 11.25 am	Enabling Distributed Radar LSSC Consortium
11:25am to 12.00 noon	Accelerating SAR image formation Prof Mike Davies, Edinburgh Consortium
12.00 am to 12.35 pm	Radar Technologies Selex ES, Edinburgh
12:35 pm to 1:30 pm	Lunch
1:30 pm to 2:30 pm	Panel Session with Q&A
2:30 pm to 3:00 pm	Prizes from previous Themed meeting & Dstl present 2 current challenges from the MIMO and Radar Signal Processing domain
3:00 pm to 4:00 pm	Refreshments available and split into groups to discuss solutions to one of the two challenges
4:00 pm to 5:00 pm	Each group presents findings with an open discussion. Close