

# Agenda – UDRC Themed Meeting

## Underwater Sensing, Signal Processing and Communications

### Summary of the event

This UDRC Themed meeting will investigate the challenges that are involved in Underwater Sensing, Signal Processing and Communications in a defence context. This meeting aims to identify synergies, share experiences and views, and to understand challenges in this important area.

### Tuesday, May 16, 2017

<b>09:00 to 09:30</b>	<b>Refreshments</b>
09:30 to 09:40	Welcome and introduction <i>Jonathon Chambers, Newcastle University</i>
09:40 to 10:05	Towards large scale underwater communication networks – miniature, low cost, low power acoustic transceiver design <i>Jeff Neasham, Newcastle University</i>
10:05 to 10:30	Underwater acoustic sensing: the resolution problem <i>Yan Pailhas, Heriot-Watt University</i>
10:30 to 10:55	Exploiting sparsity for underwater acoustic source localisation <i>Wenwu Wang</i>
<b>10:55 to 11:15</b>	<b>Panel Discussion</b>
<b>11:15 to 11:40</b>	<b>Refreshments</b>
11:40 to 12:05	Guard-free OFDM underwater acoustic communications <i>Yuriy Zakharov, University of York</i>
12:05 to 12:30	Signal processing challenges in underwater sensor systems <i>Richard Brind, Atlas Elektronik</i>
12:30 to 12:55	Broadband processing and beamforming <i>Stephan Weiss, Strathclyde University</i>
<b>12:55 to 13:15</b>	<b>Panel Discussion</b>
<b>13:15 to 14:00</b>	<b>Lunch</b>
14:00 to 14:40	<b>Tour of SEALab facilities</b>
14:40 to 15:05	New paradigms in underwater micronavigation <i>Salvatore Caporale, Heriot-Watt University</i>
15:05 to 15:30	Underwater imaging using single-photon multispectral Lidar <i>Yoann Altman, Heriot-Watt University</i>
15:30 to 15:45	Dstl Challenge Competition winners <i>Jack Harris, Dstl</i>
<b>15:45 to 16:00</b>	<b>Panel Discussion</b>
<b>16:00</b>	<b>Close</b>