

**Distinguished Visiting Fellow Final Report:
Prof. Wyatt Newman
December 2, 2012**

This report summarizes the activities of Prof. Wyatt Newman as a SICSA Distinguished Visiting Fellow at U. Edinburgh, Fall, 2012. Proposed activities were fulfilled, including offering seminars, presenting a master course, and engaging with Informatics personnel—notably with respect to collaboration on the DARPA Robotics Challenge.

Three seminars, “An overview of autonomous robotics research,” were presented at U. Edinburgh (Sept 21), U. Glasgow (Sept 27) and Heriot-Watt (Oct 3). These presentations helped to draw interest for the master class offered in November.

A master class on compliant-motion control was given at U. Edinburgh Nov 15-16, which had 37 registrants from five SICSA universities. Formal course notes were distributed to attendees. The class was well received, with virtually all first-day attendees returning for day 2. This class also prompted expressions of interest from attendees to collaborate on the DARPA Robotics Challenge.

Prof. Newman also offered guest lectures in courses of Prof. Sethu Vijayakumar and Barbara Webb.

During his stay, Prof. Newman interacted with members of the Institute for Perception and Behavior, taking part in group meetings and seminars, which included activities to explore collaborations on the DARPA Robotics Challenge (DRC). Much of Prof. Newman’s time within the Information Forum was devoted to studying “ROS”, the Boston Dynamics “Atlas” robot and the “Gazebo” simulator of this robot by ORSF—all elements of the DARPA Robotics Challenge. On Nov. 19, Prof. Newman presented an update on the DRC, which attracted wide interest within IPAB. Prompted by interest from DRC-update attendees, On December 3, Prof. Newman will also be offering a tutorial on how to program the Atlas robot simulator in Gazebo using the “Robot Operating System” (ROS) (although this tutorial will be held after the officially supported DVF period) and will be interviewed for “CompuCast.”

Beginning January, 2013, Prof. Newman will be at Hong Kong University working on the DARPA Robotics Challenge. A graduate from Informatics is being recruited to work on this project, and other students and faculty have expressed an interest in collaborating remotely. Prof. Vijayakumar is also investigating acquiring a Boston Dynamics “Atlas” robot, which would dramatically strengthen collaboration in the DRC.