**SPE Gromits Initial Project Overview**

Outline:

Over the course of the academic year, we will develop the software and launch it onto the hardware of the University’s two smart Gromit Sculptures. From the previous year’s team, we have a basic web app set up that transmits a video link between two clients with some basic authentication routines. Our task will be to improve on their design and add more robustness and functionality to their design; in the process making the sculptures more interactive for their user.

Ideas:

Currently, we have a few ideas of how to develop the software for the Gromits:

* Improved web backend security (may include a rework of the web backend from last year’s team)
* Web routing via Eduroam
* Improved UI design
* Data visualisation on the screen from Open Data sources
* Section for University announcements on the screen
* Other interactivity ideas are being brainstormed currently (Current topics/issues).

Timeline:

* TB1 - Focus on software development and have the implementation working across two machines. This includes making the web app boot and auto-authenticate with its twin and then establishing the video link. Each screen would then also have some overlays of information for the user.
* TB2 - Then we work on installing the app onto the two Gromit machines and interfacing with each other over the University’s network. This will involve having the Gromits auto-connect to each other with no additional input.

Goals:

1. The project needs to “just work” with no outside input required for the day-to-day running of the sculptures.
2. Bottom line is that the project needs to provide a secure video link between the two Gromits.
3. Security is a high priority.
4. For further interactivity, utilise open data sources to provide a useful graphic display.