Canarie AAP-03 "Shared Spaces" Project Milestone 1 Report Appendix 1

Report on the McGill Setup of 3 Plasma Displays Connected to High Definition Cameras John Roston

1. Problem of Overlapping Fields of View

The three displays setup is intended to provide a panoramic view of the room at the far end to create the feeling of a large shared room with a window in the dividing wall that separates the room into two halves. The problem is that when the cameras above the displays are all pointed perpendicular to the displays, they create overlapping fields of view where participants can appear on two displays at the same time as shown in Fig. 1.

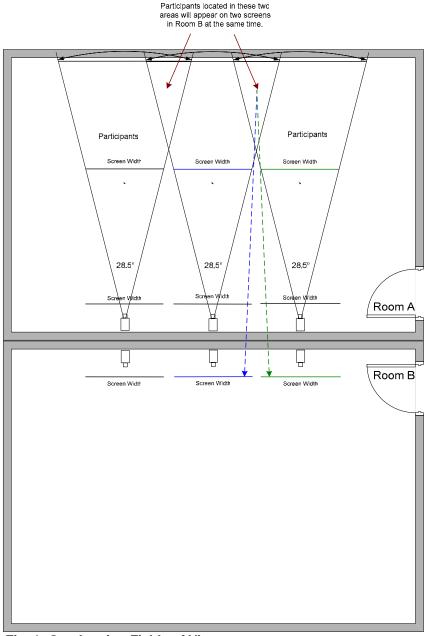


Fig. 1: Overlapping Fields of View

2. Solution Adopted

The middle camera remains perpendicular to the displays, but the two end cameras are rotated outward at an angle of 9 degrees to eliminate the overlap up to a distance of 4.5m from the displays. The lenses are adjusted so that participants at a distance of 2.5m from the displays appear life size on the displays at the far end. The participant area is thus in the space between 2.5m and 4.5m from the displays as shown in Fig 2.

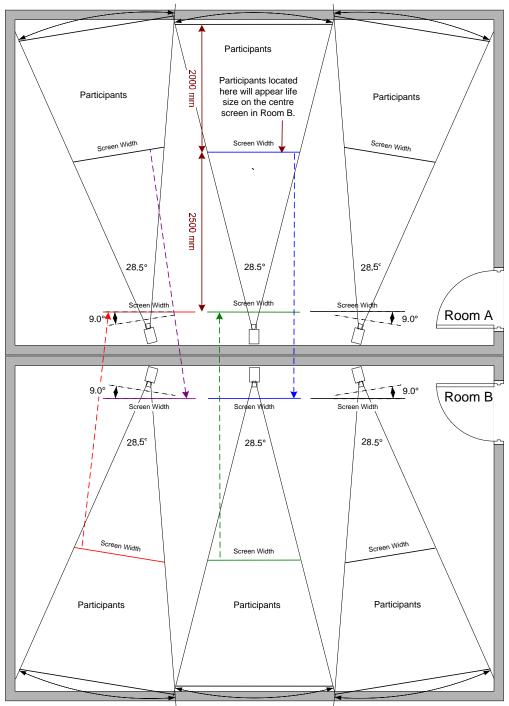


Fig. 2: Room Layout Showing Participant Area