

## **MDPH480/PHYS480/ASTR480/MAPH480 Research Projects 2009**

Project Title: Investigation of devices made with atomic clusters

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### **Abstract of the Proposed Research**

Atomic clusters have been intensively studied during the last decades as they are, among other applications, potentially a key point in the miniaturization of electronic devices. The capacity to tailor the cluster size allows the realization of devices with specific and unusual properties.

The project will deal with the fabrication and characterization of cluster films deposited on silicon samples. Depending on your interests and aptitudes, the research will be focused on laboratory work (Cluster Room in the Physics building and Electrical Engineering Micro Electronics Laboratory) or computer simulation of cluster deposition.