FINAL TECHNICAL REPORT

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1999 HU CFRT SUMMER FUSION HIGH SCHOOL WORKSHOP

PI: DR. HALIMA ALI

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DISCLAIMER

Final Technical Report
Support for HU Summer 1999 High School Fusion Science Workshop

The center conducted its fourth High School Summer Fusion Science Workshop in Summer 1999. The center had two faculty mentors and a graduate student available for this workshop. The center accepted four scholars in this workshop. Prof. Halima Ali coordinated this workshop.

Table 1: Participants of the 1999 Summer Fusion Science Research Workshop, their race/gender, the high school they attend

STUDENT	RACE/GENDER	HIGH SCHOOL
Anshul Haldipur	Asian-American /Male	Clements High School ,Sugar Land, Texas
Roberto Torres	Hispanic-American/ Male	Colegio Catolico Notre Dame Caguas, Puerto Rico
Rose Zella Jordan	African-American/ Female	Loachapoka High School Loachapoka, Alabama
Michelle Liang	Chinese-American /Female	Miami Northwestern Senior High School, Miami, Florida

During the first two weeks, the students received intensive instructions and training in the basics of energy, plasma and fusion sciences. Each student was assigned to a research mentor according to the student's interest in a specific research area and problem. Students received one-on-one instructions and training by their mentors to further their understanding of the subject and to introduce to relevant concepts such as magnetic confinement fusion, tokamaks, divertors and area-preserving maps. Students also engaged variety of other activities which was designed to develop the students' oral presentations and technical writing skills.

In addition to the above technical programs, students participated a companion program with other students - such as visiting the NASA Langley Laboratories, Jefferson Lab and alike- through the NASA SharPlus program.

Table 1: Participants of the 1999 Summer Fusion Science Research Workshop, their faculty mentor and their research projects

STUDENT	FACULTY MENTOR	RESEARCH PROJECT
Anshul Haldipur	Dr. Punjabi	Changes in the Last Good Magnetic Surfaces Due to Low Mn Perturbations in a Divertor Tokamak
Roberto Torres		
Rose Zella Jordan	Dr. Ali	Chaotic Behavior of Magnetic Flux Surfaces When the Value of k Is Increased
Michelle Liang		

Based on their summer project, Mr. Haldipur and Mr. Torres entered in the 1999 Siemens Westinghouse Science and Technology competition under Dr. Punjabi's guidance. The project title was ***Changes in the Last Good Magnetic Surface due to Low MN Perturbations in a Divertor Tokamak.*** I am very happy and proud to state that these students not only won for inclusion of the event but also advanced to the Southwest Regional Level. Southwest region is one of the six regions for the competition. Dr. Alkesh Punjabi received a plaque for Mentor Recognition by the Siemens Westinghouse Science & Technology. Although not accepted for publication, Mr. Haldipur and Mr. Torres also submitted the results of their work to Physics of Plasmas for publications.