Topics of Thesis Projects Prof. Kayal, 29.10.2008

1- Design of a nano satellite for the observation of the transient lunar phenomena (TLP) 
(already reserved to Han Bao)

2- Design, construction and test of a payload data handling system for the observation of the transient lunar phenomena (TLP)

3- Design of a payload data handling system for nano satellites for detection of objects in the earth orbit

4- Design and construction of a star sensor for pico and nano satellites

5- Design, construction and test of a communication system between satellites and ground stations using the D-STAR protocol

6- Analysis of communication needs of future European interplanetary missions

7- Design construction and test of a deployable solar panel for nano satellites

8- Design and implementation of a on board planning system for nano satellites

9- Design of a self diagnosis system for nano satellites

10- Design and implementation of a attitude control modul for the satellite mission design and simulation tool SMASS

11- Design and implementation of a power simulation module for the satellite mission design and simulation tool SMASS

12- Design and implementation of a thermal subsystem simulation module for the satellite mission design and simulation tool SMASS

13- Design and implementation of a graphical user interface for the visualization of results of the mission satellite design and simulation tool SMASS

14- Concept of a nano satellite communication relais system for control of planetary mobile rover

For detailed Information please contact:

Prof. Dr. Hakan Kayal
Spacecraft Control and System Design
Computer Science VII, Univ. Wuerzburg
Am Hubland, D-97074 Wuerzburg, Germany

kayal@informatik.uni-wuerzburg.de
Tel. +49-931-888-6649