# **Planning Systems in Hubble Space Telescope**

Doing planning and scheduling for HST is a complex problem for many reasons. In a year HST can analyze thousands of targets. There are a large number of interacting constraints with timescales covering several orders of magnitude (minutes to years). The Schedule is modified constantly as observations are made.

HST implements a two level hierarchical approach for its scheduling. Scheduling has been divided in two: Long-term scheduling allocates observations over a 1-2 year interval, while short-term scheduling covers a one-week period and creates a detailed timeline of activities.

Short-term scheduling program is called Science Planning and Scheduling System (SPSS). Long-term scheduling programm is called Spike.

Spike works by