

Temporal Planning in Space



based on:

“Application of Mapgen to MER,”
by Kanna Rajan

“Handling Time:
Constraint-based Interval Planning,”
by David E. Smith

Brian C. Williams and
Robert Morris (guest lect.)

16.412J/6.834J

March 2nd, 2005

Outline

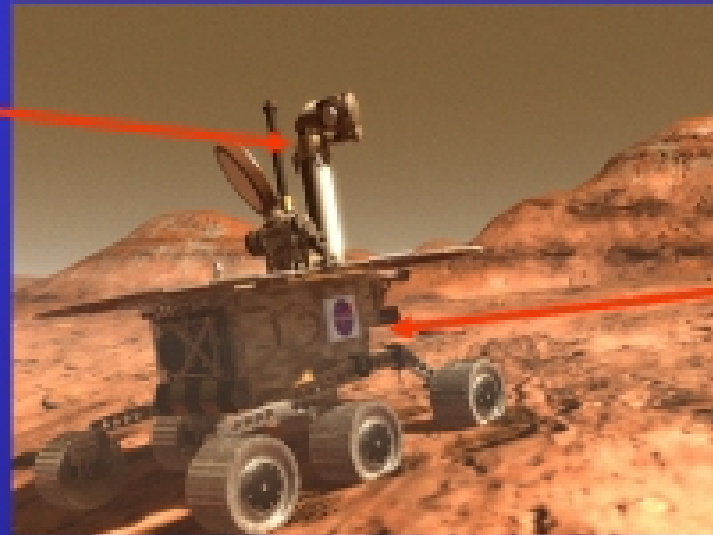
- Operational Planning for the Mars Exploration Rovers
- Review of Least Commitment Planning
- Constraint-based Interval Planning
- Temporal Constraint Networks
- Temporal Constraints with Preference

Mars Exploration Rovers – Jan. 2004 - ?

Mini-TES

Pancam

Navcam



Mossbauer spectrometer

APXS

Rock Abrasion Tool

Microscopic Imager

Mission Objectives:

- Learn about ancient water and climate on Mars.
- For each rover, analyze a total of 6-12 targets
 - Targets = natural rocks, abraded rocks, and soil
- Drive 200-1000 meters per rover