## **Course Overview**

The challenge this year is to negotiate and complete a series of tasks whilst on the planet's surface with the added benefit of having extraordinary vision and long arms so that team members will be able to see the progress of the Rover in real time.

The tasks are compulsory and each must be attempted and completed in order to complete the challenge.

- 1. Seismic Activity Investigation
- 2. Collecting (the correct) objects
- 3. Mysterious Light Tunnel
- 4. Morse Decode decoding
- Spatial Vortex

The requirements for completing the individual tasks are specified on their individual task sheet but, broadly speaking; they each consist of the following elements:

- Prior to the start of the planet based mission a mission data sheet, detailing the location and order of the tasks will be distributed.
- When the Rover first lands on the planet it will be orientated in the defined direction indicated on the mission data sheet. The bearing of the rover will need to be changed to enable a task to be started (this should be verified using sensors on the rover).
- Performing the task requirements as detailed on each of the task sheet, displaying informative information, findings, data etc. on the controlling earth station, paying particular attention to the marking criteria in order to maximise the score achieved.
- Ensuring that the Mission Director, or his assistant, is informed about the results of the tasks in order that the score is recorded accurately.
- Correctly exiting the task and moving on to the next task, performing the optional task, or moving to the end location of the course.

In addition to the tasks undertaken on the planet's surface during the final session there is prior a further task (the Video Task), the resultant presentation should be submitted at the start of the scheduled BI2SM16 session in **week 7** in the form of a short video. The video should be able to be viewed without additional explanation or intervention, i.e. it should selfload and run when the media containing the video is loaded into a Microsoft Windows™ PC.