

PROPOSAL FOR ISSI WORKSHOP
(A. Coustenis, 26/4/06)

5-days workshop, 45 invited people

Planetary chemistry issues in support to the analysis of space mission data

Potential conveners: A. Coustenis, C. de Bergh (LESIA, Meudon Observatory); V. Boudon (LPUB, Dijon), J-M Bernard (LPG, Grenoble)

The purpose of this workshop would be to solve some of the problems encountered when scientists try to analyze and interpret the data acquired by space missions such as those dealing with objects with an atmosphere : Titan, Mars, Venus etc (Cassini-Huygens, Mars Express, Venus Express, etc).

Such problems have to do with the spectral definition of gaseous molecules in the atmosphere (such as CH₄ absorption coefficients, but also H₂O and CO₂, etc). Also, organic molecules produced in the atmosphere (such as tholins in the case of Titan and Triton) are not currently well understood and there are several different studies which do not agree among themselves.

In order to do so we would like to bring together experimentalists and theoretical modelers who can present and make known their databases (linelists) and other products and discuss them with their colleagues in order to produce a comprehensive and most useful document which will allow scientists to achieve a better understanding of the parameters they use for analyzing and interpreting the space mission data that they have.