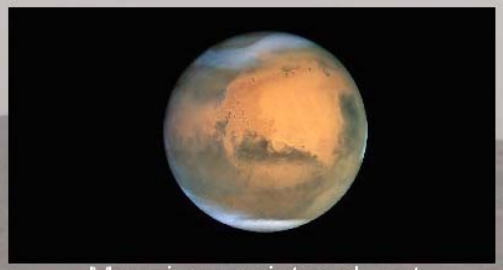
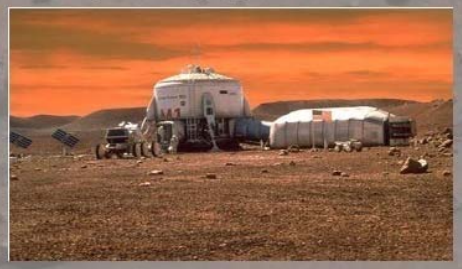


Mars is our sister planet.
Even though far away, it has become accessible to our rockets.
In its early history, water run over its surface and, being stable enough, transformed its magmatic rocks into phyllosilicates, sulfates or carbonates.
Its CO_2 atmosphere was dense enough for such liquid state and action.
After its internal dynamo stopped because its mantle was too cold, its magnetosphere disappeared and most of its atmosphere escaped to space. Water remained as ice at the poles and in many places underground.

What is left of the CO_2 atmosphere could be used to shield our exploring crews against radiations and provide methane and oxygen to propel their rockets back to Earth. Inhabited flights are thus possible and should replace robotic ones which, though limited in their means, have been very rewarding, to the point that we can now consider that minimum conditions existed for Life to emerge some 3.5 B years ago, just as it did on Earth.



Mars Society Switzerland

www.
planete-
mars-suisse.com

The "Mars Society Switzerland" is the Swiss branch of the Mars Society. Its aim is to gather Swiss residents and nationals interested in the exploration of Mars around a core of specialists involved in such exploration.
They act to facilitate the progress of research and to promote inhabited as well as robotic flights in order to gather more data and understanding about the Red Planet (and indirectly Earth and Life).
It maintains close links with the other branches of the Mars Society worlwide, in particular the Mars Society USA and Association Planète Mars (the French branch of the Mars Society).

chyn
Center of Hydrogeology and Geothermics

The Swiss Center for Hydrogeology and Geothermics (UniNE) is a competence center for research and education in the groundwater and geothermal sciences fields. It is the only such dedicated center in Switzerland.
Its most important missions are to provide students with knowledge that enable them to address groundwater management issues; to initiate, develop and participate in research projects that address and anticipate challenging issues in hydrogeology and geothermics; to offer know-how and advice to public and private entities.

MARS SESSION

8th SWISS GEOSCIENCE MEETING 2010 FRIBOURG

Mars:
Water,
Climate & Geology

Conferences Symposium

Fribourg, Université Pérolles 2
Saturday, November 20th 2010
From 11h00 till 17h00

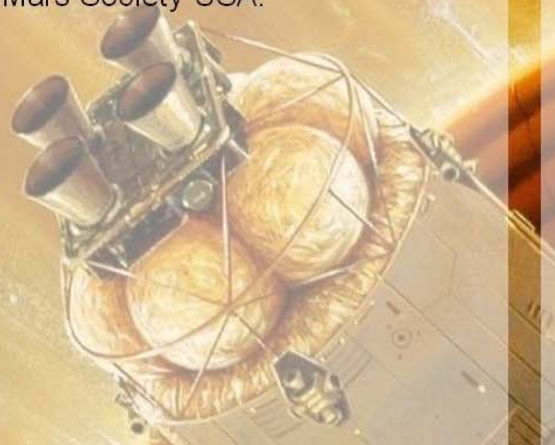
chyn
Center of Hydrogeology and Geothermics
University of Neuchâtel

Mars Society Switzerland
www.
planete-
mars-suisse.com

NASA rover Spirit in Husband Hill, looking towards Gusev Crater (April 23rd 2005). Credit: NASA/JPL/Cornell University

8th Swiss Geoscience Meeting; MARS Session Program

11h00-11h05
Introduction by François Zwahlen, Professor at the Center for Hydrogeology & Geothermics (Neuchâtel).
11h05-11h25
Mars, a remote, now accessible, geologic object.
Pierre Brisson, Mars Society Switzerland, Association Planète Mars, Mars Society USA.



Examples of instruments used for the exploration of Mars:
11h25-11h45
Atomic Force Microscopy on Mars.
Dr Sebastian Gautsch, SAMLAB/IMT/EPFL
11h45-12h05
The potential of close-up imaging on the surface of Mars.
Dr Beda Hofmann, University of Bern.

Interpretation of Data& Analysis
13h40-14h00
Core and early crust formation on Mars.
Gregor Golabek, M.Sc. in Geophysics, Ph.D student, Inst.of Geophysics, Geophysical Fluid Dynamics, ETH Zürich.
14h00-14h20
Putative oceans and Hydrothermal activity on Mars.
Charles S. Frankel, University of Arizona, Association Planète Mars, Mars Society USA.
14h20-14h40
Volatiles in the atmosphere of Mars: the effect of volcanism and escape.
Cédric Gillmann, PHD , ETH Zürich, Institut de Physique du Globe (Paris).
14h40-15h00
Mars, Water, Habitability.
Dr Jean-Pierre Bibring, Institut d'Astrophysique Spatiale, Université Paris-Sud.

Martian cocktail and Poster session.

Looking Forward:
16h00-16h20
The ExoMars Rover Mission, Goals & Instruments.
Dr Jean-Luc Josset, Space Exploration Institute (Neuchâtel).
16h20-16h40
Dreaming as an incentive for Research:
"The Marsdreamers", one or two sequences of Richard Dindo's latest documentary.

"On to Mars!" Credit image: Manchu / Association Planète Mars

Information

The hosting party of the Meeting ("SGM2010") is the Department of Geosciences of the University of Fribourg and the Platform Geosciences of the Swiss Academy of Sciences--SCNAT.

Campus Pérolles2 is located south of the main railway station. From the station, you can take either bus 1 (direction Marly) or 3 (direction Pérolles) or 7 (direction Cliniques), until the "Charmettes" stop. The building where SGM2010 takes place is in front of this bus stop, across the street, in the Faculté des Sciences Economiques (blvd Pérolles 90).

Registration to SGM2010 is required. See, below, on SGM2010 website. Fees (to be paid cash upon arrival) are: CHF 50 or (for students/PhD students) CHF30. They include coffe & lunch on Saturday.

Websites:
SGM2010: http://geoscience-meeting.scnatweb.ch/sgm2010/
CHYN: www.unine.ch.chyn
Mars Society Switzerland: www.planete-mars-suisse.com

In case of need, write to pierre_brisson@yahoo.com or to pierre.dezes@scnat.ch