

PLANETARY SURFACE EXPLORATION COURSE

DESIGN & EXECUTE A SCIENTIFIC ROVER MISSION

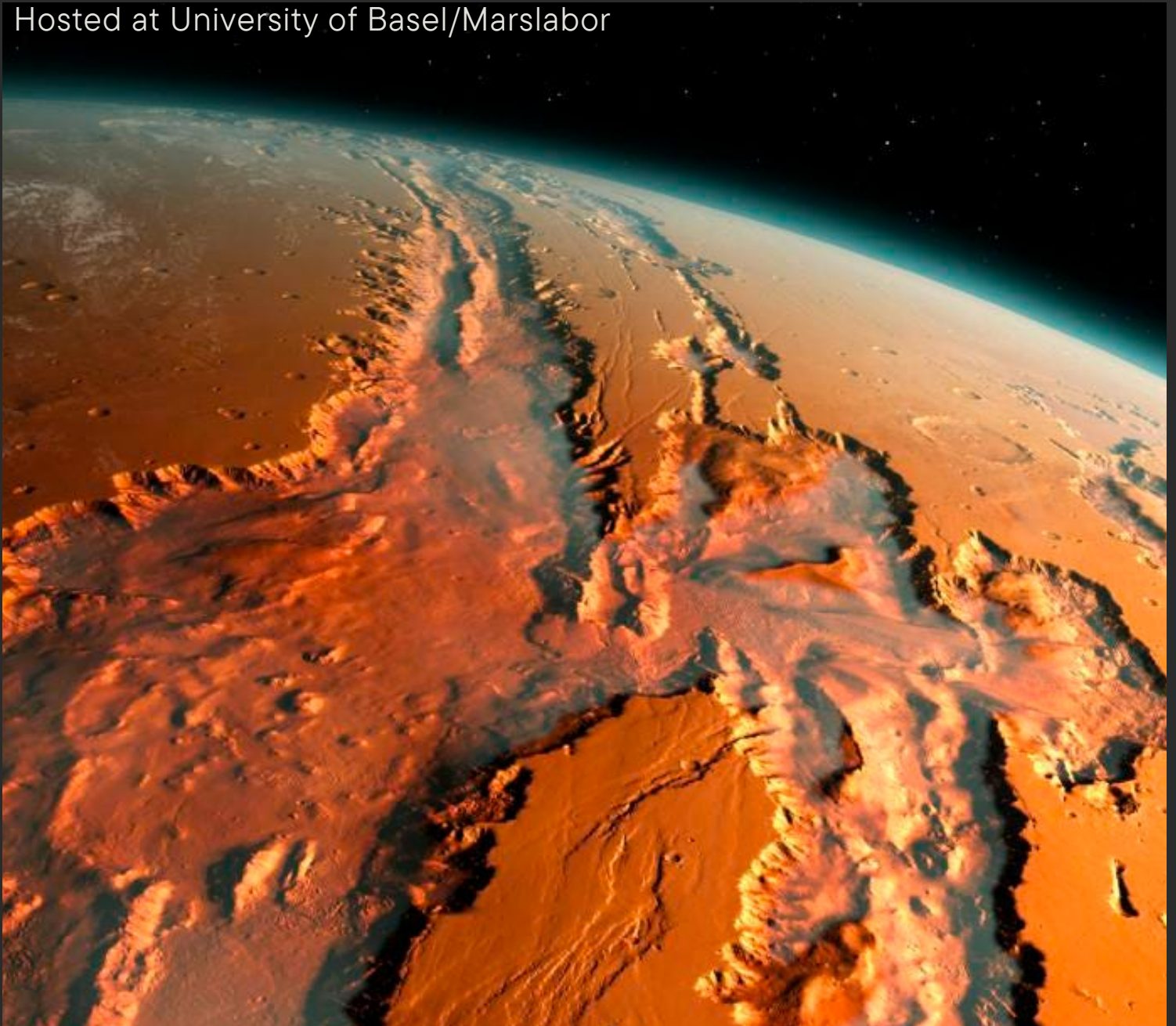
- FOR SCIENCE & ENGINEERING MSC AND PHD STUDENTS

5 DAY COURSE: 26.02 - 01.03.2024

Apply here:



Hosted at University of Basel/Marslabor



COURSE OVERVIEW:

DAY 1 - WELCOME & INTRO

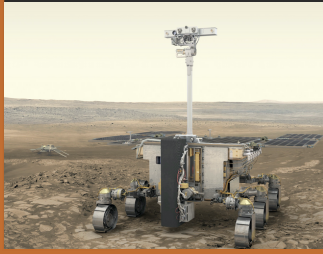
COURSE & PARTICIPANTS INTRODUCTION

ExoMars - an astrobiology program
CLUPI - imaging on Mars
Introduction to Oxia Planum geology



Space
eXchange
Switzerland

Space in Switzerland (SXS) -
G. Bourban



DAY 2 - MISSION PLANNING MARS

ENGINEERING - getting to Mars - systems engineering
SCIENCE - biosignatures & planetary geology
Group exercise: team formation
Establishing concept of operations



GUEST SPEAKER:

ESA- ExoMars Project Scientist
J. Vago

MARSLABOR UNIVERSITÄT BASEL

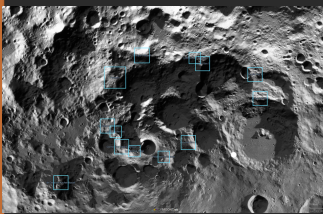


DAY 4 - LUNAR DAY

VISIT OF MARSLABOR

ENGINEERING - exploring the Moon with legged robots

SCIENCE & AI- lunar resources
Robotic demonstration & simulation



DAY 3 - MARS DAY

Full day simulation
Science mission & data analysis



GUEST SPEAKER:

NASA JPL - MARS 2020
Deputy Project Scientist
K. Stack Morgan



DAY 5 - SUMMARY

WAS/ IS THERE LIFE ON MARS & CAN WE FIND IT?

STUDENT PRESENTATIONS & PRIZE QUIZ



A SPECIAL GUEST: KEYNOTE & NETWORKING APERO

COURSE OUTCOMES:

You will learn about **space mission science, planetary geology, astrobiology & robotics**



A chance to plan and execute a rover mission - **engineers & scientists synergies**



Brainstorm and find **collaborations** for your next planetary project!