

# EDUCATIONAL OPPORTUNITIES THROUGH MARS ANALOG RESEARCH

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### The Austrian Space Forum

- Citizien science and research organisation since 1998
- 170 members, 25% are space professionals
- High public visibility & space outreach & academic involvements



### Research & Development

- Hardware development:
  - Aouda.X spacesuit simulator
  - Mars analog rovers
  - Stratospheric balloons
  - Cubesats
- Research focus
  - Planetary protection
  - Planetary surface operations in high-fidelity settings
  - Optimizing remote science support
- Major field campaigns: 11 so far





#### **Student Activities**

- Internships
- Academic Theses
- Workshops
- Junior Researcher Program



### Internships

- 5 10 interns each year
- National & international students

#### **Cross Section of Tasks:**

- OeWF Space Suit Laboratory
  - Assistance in Analog Astronaut Training
  - Working directly on the Space Suit Simulator hardware
  - 3D printer operation and preparation of print templates
- Marketing research and analysis
- Outreach event planning and implementation
- Conducting tele-lectures
- Preparation for Field Tests and Simulation Campaigns
- Participation in Mars Simulations as part of Mission Support Team
- Preparing and participating in technical visits to partners (eg. industry, ESA)



#### **Academic Theses**

- 2009 2015: 8 BSc and 7 MSc theses
- Opportunity to work with experts hands-on
- 2 24 week internship
- Interdisciplinary



### Workshops & Tele-Lectures





### Junior Researcher Program

- Pilot Project during Amadee-15
- 15 students
- Join Mission & adopt an experiment
- Interact with Pis
- Visit Test Site & Mission Support Center
- Career talk
- Become Space Ambassadors





#### Conclusions

- Opportunities for international student involvement
  - Internships
  - Thesis Supervision
  - Mission centric opportunities
- Positive Feedback
- Stepping stone for space career





## Questions?



#### References

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- Austrian Space Forum Website, Overview Mars Simulations <a href="http://www.oewf.org/en/portfoliocat/field-simulations-expeditions/">http://www.oewf.org/en/portfoliocat/field-simulations-expeditions/</a>
- AMADEE-15 Final Mission Report <u>http://www.oewf.org/dl/AMADEE-15 FinalReport PUBLIC V3.pdf</u>
- Austrian Space Forum Website, Internship Opportunities http://www.oewf.org/en/become-member/jobs-internships/
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