

Dr. Johannes Brückner – Talks and Posters

Listing covers the events a presentation was given:

Date (day.month.year) in decreasing order (begin of event); title of presentation(s);

Type of presentation (talk, seminar, lecture, poster); society or institution organizing the event; venue.

2012

8.02.2012 **The Geochemistry of Martian Surface Sites: Results by the two NASA MER Rover Missions;**
Talk; Scientific Advisory Board Meeting, Max-Planck-Institut für Chemie (MPIC); MPIC, Mainz.

2011

05.05.2011 **Thick Target Irradiations by Energetic Protons: Simulations of Planetary Gamma-Ray Spectroscopy;**
Talk; “Nuclear Planetology - Recent Developments” Workshop, Institut de Recherche en Astrophysique et Planétologie (IRAP); Toulouse, France.

27.04.2011 **Two robotic rovers on the red planet: Application of in-situ analytical methods for the exploration of the martian surface;**
Invited talk; DECHEMA EuroPACT 2011 Conference; Conference Center, Glasgow, UK.

07.03.2011 **On the Geochemistry of Soils at Gusev Crater and Meridiani Planum, Mars: Similarities and Differences;**
Talk; 42nd Lunar and Planetary Science Conference (LPSC), Lunar and Planetary Institute (LPI); The Woodlands Waterway Marriott Hotel and Convention Center, The Woodlands, Texas, USA.

2010

13.12.2010 **Local Chemistry and Mineralogy of Martian Soils Measured by In-Situ Instruments of the two Mars Exploration Rovers: Implications for Global Geochemistry;**
Poster; American Geological Union (AGU) Fall Meeting; Moscone Center, San Francisco, CA, USA.

18.10.2010 **In-situ nuclear analytical techniques: X-Ray and Mössbauer Spectroscopy; Lecture 1; Results and Discussion of Mars Rover Missions, Lecture 2;**
Hawai'i Institute of Geophysics and Planetology (HIGP), University of Hawai'i; HIGP, Honolulu, HI, USA.

28.06.2010 **Thick Target Experiments, Part 1: Proton Beam Monitoring and Fluxes, Talk 1; Thick Target Experiments, Part 2: Gamma-Ray Counts and Fluxes, Discussion, and Conclusion; Talk 2;** Nuclear Planetology Meeting, International Space Science Institute (ISSI); ISSI, Bern, Switzerland.

01.03.2010 **Analysis of complex gamma-ray spectra: Simulations for planetary gamma-ray spectroscopy of solar-system bodies;**
Poster; 41st Lunar and Planetary Science Conference (LPSC), Lunar and Planetary Institute (LPI); The Woodlands Waterway Marriott Hotel and Convention Center, The Woodlands, Texas, USA.

2009

14.12.2009 **Sulfur concentrations of the Martian surface derived from orbital Mars Odyssey GRS and in-situ MER APXS measurements: implications on the selection of future landing sites;**
Poster; American Geological Union (AGU) Fall Meeting; Moscone Center, San Francisco, CA, USA.

01.07.2009 **Loss of Geochemical Context Information of Drill Cores and Traverse Samples for ExoMars Mission;**
Talk; ExoMars Science Meeting, European Space Research and Technology Centre (ESTEC); ESTEC, Noordwijk, Netherlands.

23.03.2009 **Mobility of Phosphorus on the Martian Surface and in a Martian Meteorite;**
Poster; 40th Lunar and Planetary Science Conference (LPSC), Lunar and Planetary Institute (LPI); The Woodlands Waterway Marriott Hotel and Convention Center, The Woodlands, Texas, USA.

27.01.2009 **5 Jahre auf dem Mars - Die Mars Exploration Rover Mission aus Mainzer Sicht;**
Vortrag; Jubiläumsveranstaltung (zusammen mit Dr. G. Klingelhöfer, I. Fleischer, Dr. Ch. Schröder und Prof. Dr. G. Neukum), Fachbereich Chemie; Johannes-Gutenberg-Universität, Mainz.

2008

15.12.2008 **Sulfur Concentrations on Martian Surface Derived by In-Situ APXS Measurements: Evidence for Sulfates;**
Poster; American Geological Union (AGU) Fall Meeting; Moscone Center, San Francisco, CA, USA.

17.11.2008 **Review of Mars Orbiter Gamma-Ray-Spectrometer Presentations: 2001 – 2008;**
Talk; NASA Mars Odyssey Orbiter, Gamma-Ray Spectrometer (GRS) Science Meeting; Sheraton, Kauai, HI, USA.

15.10.2008 **In-Situ Characterisation of surface composition of NEO's with a small instrument package;**
Talk; Workshop NEOs (Near Earth Objects) & Space Debris; DLR Raumfahrt-Agentur, Bonn.

13.4.2008 **Chemical Composition of Meridiani Sediments and Precursor Material: Measurements by the APXS onboard the Mars Exploration Rover Opportunity;**
Talk; European Geosciences Union (EGU) General Assembly 2008; Austria Center Vienna, Vienna, Austria.

25.03.2008 **Chemical Composition of Meridiani Sediments and Possible Precursor Material (long version);**
Talk; NASA Mars Odyssey Orbiter, Gamma-Ray Spectrometer (GRS) GRS Meeting; University of Arizona, Lunar & Planetary Lab, Space Sciences, Tucson, AZ, USA.

10.03.2008 **Chemical Composition of Meridiani Sediments and Possible Precursor Material;**
Talk; 39th Lunar and Planetary Science Conference (LPSC), Lunar and Planetary Institute (LPI); South Shore Resort and Conference Center, League City, Texas, USA.

2007

10.12.2007 **Chemical Composition of Meridiani Sediments: Traces of Aqueous Past on Martian Surface;**
Poster; American Geological Union (AGU) Fall Meeting; Moscone Center, San Francisco, CA, USA.

12.11.2007 **Geochemical evidence of ancient water by the APXS of the Mars Exploration Rovers at Gusev Crater and Meridiani Planum;**
Talk; European Mars Science and Exploration Conference (EMSEC): Mars Express and ExoMars, European Space Research and Technology Centre (ESTEC); ESTEC, Noorwijk, Netherlands.

5.11.2007 **Simulation experiments for Planetary Gamma-Ray Spectroscopy – Implications for Orbital Mapping of Elemental Compositions;**
Talk; Nuclear Planetology Meeting, International Space Science Institute (ISSI); ISSI, Bern, Switzerland.

15.10.2007 **Thick Target Irradiations & Chemical Composition of Martian Rocks;**
Talks; NASA Mars Odyssey Orbiter, Gamma-Ray Spectrometer (GRS) Science Meeting; Gurneys's Inn – Resort, Montauk, NY, USA.

19.08.2007 **Evidence of Ancient Water on Mars by the APXS Onboard the Mars Exploration Rover Opportunity;**
Talk; Goldschmidt 07 Conference, Institut für Geologie und Mineralogie; Universität Köln, Köln.

09.07.2007 **Chemistry of Martian Surfaces as Determined by APXS of MER Rovers;**
Poster; Seventh International Conference on Mars; California Institute of Technology (Caltech), Pasadena, CA, USA.

22.05.2007 **Chemical Composition of Martian Rocks;**
Talk; 2007 Joint Assembly American Geological Union (AGU); Acapulco Convention Center, Acapulco, Mexico.

16.05.2007 **Elemental composition variations of the martian surface;**
Talk; NASA Mars Odyssey Orbiter, Gamma-Ray Spectrometer (GRS) Science Meeting; University of Arizona, Lunar & Planetary Lab, Space Sciences, Tucson, AZ, USA.

15.04.2007 **Ultramafic Rocks at Gusev Crater, Mars, and their Relationship to Martian Meteorites;**
Poster; European Geoscience Union (EGU), General Assembly 2007; Austria Center Vienna, Vienna, Austria.

12.03.2007 **Algonquin Class Rocks of Columbia Hills in the Gusev Crater, Mars, and their Relationship to SNC Meteorites;**
Poster; 38th Lunar and Planetary Science Conference (LPSC), Lunar and Planetary Institute (LPI); South Shore Harbour Resort & Conference Center, League City, Texas, USA.

12.02.2007 **APXS Update & Overview of Chemistry, MER-Mission;**
Talk; Athena Science Team Meeting, Mars Exploration Rovers, NASA; California Institute of Technology (Caltech), Pasadena, CA, USA.

2006

11.12.2006 **Chemical Composition by the APXS along the Downhill Traverse of the Mars Exploration Rover Spirit at Gusev Crater;**
Poster; 2006 American Geophysical Union (AGU) Fall Meeting; Moscone Center West, San Francisco, CA, USA.

14.11.2006 **Elemental composition variations of the martian surface: Comparison of in-situ and orbital concentration data;**
Talk; Mars Odyssey Orbiter, Gamma-Ray Spectrometer (GRS) Science Meeting, NASA; Mauna Lani Bay Hotel, Hawai'i, HI, USA.

20.11.2006 **Chemistry of the Martian surface: Recent results from the Mars Exploration Rovers;**
Lecture; Hawai'i Institute of Geophysics and Planetology (HIGP), University of Hawai'i; HIGP, Honolulu, Oahu, HI, USA.

22.10.2006 **Sulfur on the Martian Surface: Synopsis of all Landing Sites;**
Poster; Workshop on Martian Sulfates as Recorders of Atmospheric-Fluid-Rock Interactions, Lunar and Planetary Institute (LPI); Houston, Texas, USA.

11.10.2006 **Chemistry of the Martian Surface: Recent Results of APXS Measurements onboard the Mars Exploration Rovers;**
Talk; Centre d'Etude Spatiale des Rayonnements (CESR); CESR, Toulouse, France.

25.09.2006 **More than two Years of Chemical Sampling by the APXS on Meridiani Planum, Mars;**
Talk; 84. Jahrestagung, Deutsche Mineralogische Gesellschaft (DMG), Institut für Mineralogie; Leibniz Universität Hannover, Hannover.

2.04.2006 **Along the traverses of Mars Exploration Rovers Spirit and Opportunity: Chemical compositions derived by the Alpha Particle X-Ray Spectrometer;**
Talk; European Geosciences Union (EGU), General Assembly 2006; Austria Center Vienna, Vienna, Austria.

13.03.2006 **Two Years of Chemical Sampling on Meridiani Planum by the Alpha Particle X-Ray Spectrometer Onboard the Mars Exploration Rover Opportunity;**
Talk; 37th Lunar and Planetary Science Conference (LPSC), Lunar and Planetary Institute (LPI); South Shore Harbour Resort & Conference Center, League City, Texas, USA.

2005

02.12.2005 **One Martian Year of in Situ Chemistry by the APXS on Board the Mars Exploration Rover Opportunity at Meridiani Planum;** Talk;
One Martian Year of in Situ Chemistry by the APXS on Board the Mars Exploration Rover Spirit at Gusev Crater; Poster;
2005 American Geophysical Union (AGU) Fall Meeting; Moscone Center West, San Francisco, CA, USA.

08.11.2005 **Two Rovers with X-Ray Spectrometers on the Surface of Mars: New Results from both Traverses;**
Talk; Kolloquium, Institute for Analytical Sciences (ISAS); ISAS, Dortmund.

4.10.2005 **Gusev Update (3) - APXS Data;** Talk 1;
Meridiani Update (3) - APXS Data; Talk 2;
Mars Odyssey Orbiter, Gamma-Ray Spectrometer (GRS) Science Meeting, NASA; University of Arizona, Lunar & Planetary Lab, Space Sciences, Tucson, AZ, USA.

12.05.2005 **Zwei Rover mit Instrumenten aus Deutschland auf dem Mars;**
Vortrag (Keynote); Bayer Business Services GmbH, IT. LABwork 2005; Lindner Hotel, Leverkusen.

4.05.2005 **New Results of the Mars Exploration Rovers Mission;**
Lecture; Department of Nuclear Physics, Comenius University in Bratislava; Comenius University, Bratislava, Slovakia.

24.04.2005 **On the Geochemical Interpretation of the Compositional Maps Obtained by the Gamma-Ray Spectrometer of the Mars Odyssey Mission;**
Talk; European Geosciences Union (EGU), General Assembly 2006; Austria Center Vienna, Vienna, Austria.

14.03.2005 **Hematite on the Surface of Meridiani Planum and Gusev Crater;**
Talk; 36th Lunar and Planetary Science Conference (LPSC), Lunar and Planetary Institute (LPI); South Shore Harbour Resort & Conference Center, League City, Texas, USA.

21.02.2005 **Chemical Composition of the Martian Surface derived by the Mars Odyssey Gamma-Ray Spectrometer;**
Talk; 1st Mars Express Science Conference, European Space Research and Technology Centre (ESTEC); ESTEC, Noordwijk, The Netherlands.

18.01.2005 **Gusev Update 2 - APXS Data;** Talk 1;
Meridiani Update 2 - APXS Data; Talk 2;
Sulfuric Acid all Over Early Mars?; Talk 3;
Mars Odyssey Orbiter, Gamma-Ray Spectrometer (GRS) Science Meeting, NASA; University of Arizona, Lunar & Planetary Lab, Space Sciences, Tucson, AZ, USA.

2004

9.12.2004 **Neue Resultate der „Mars Exploration Rovers“ Mission;**
Vortrag; Gemeinschaftliches Geowissenschaftliches Kolloquium; Ort: Johannes-Gutenberg-Universität, Mainz.

17.05.2004 **Determination of chemical composition of soils and rocks at the MER landing sites Gusev crater and Meridiani Planum using the APXS;**
Talk; 2004 Joint Assembly, American Geophysical Union (AGU); Palais des Congrès, Montreal, Canada.

15.03.2004 **APXS on Mars: Analyses of soils and rocks at Gusev crater and Meridiani Planum;**
Talk; 35th Lunar and Planetary Science Conference (LPSC), Lunar and Planetary Institute (LPI); South Shore
Harbour Resort & Conference Center, League City, Texas, USA.

18.02.2004 **Der rote Planet Spirit & Co.;**
Festvortrag; Feierstunde "Jugend forscht"; DaimlerChrysler AG, Werk Wörth.

2003

16.09.2003 **Thick Target Experiments, Gamma-Ray Fluxes, Monte Carlo Simulation & Mars Odyssey;** Talk 1;
Comparison of Thick Target & Mars Odyssey Gamma-Ray Spectra; Talk 2;
Mars Odyssey Orbiter, Gamma-Ray Spectrometer (GRS) Science Meeting, NASA ; NASA Headquarters,
Washington, D.C., USA.

16.07.2003 **Die Erforschung des Mars mit Raumsonden und Rovern;**
Vortrag; Veranstaltung mit Studenten der Institute für Physik und Chemie der Universität Koblenz-
Landau/Campus Landau; Max-Planck-Institut für Chemie, Mainz.

28-07.2003 **Gamma-Ray Fluxes from Thick Target Irradiations: Experiments and Monte Carlo Simulations;**
Talk; 66th Annual Meteoritical Society Meeting; Münster.

20.07.2003 **Evolution of the Martian Crust as Derived from Surface Measurements by Mars Odyssey, Other
Space Missions, and Martian Meteorites;**
Talk; Sixth International Conference on Mars, California Institute of Technology (Caltech); Pasadena, CA, USA.

03.06.2003 **Thick Target Experiments;**
Results of Incremental Proton-Induced Radiation Damage;
Annealing Results of Radiation Damage Experiments;
Mars Odyssey Gamma-Ray Post Annealing 2;
Talks; Workshop on Background in Space Ge Detectors; Centre d'Etude Spatiale des Rayonnements (CESR),
Toulouse,

26.05.2003 **The Exploration of Mars with Gamma- and X-ray Spectroscopy;**
Talk (Seminar); Max Planck Institut für Aeronomie (MPAe); MPAe, Katlenburg-Lindau.

05.05.2003 **Gamma-Rays in a Spectrum from the Mars Odyssey Gamma-Ray Spectrometer;**
Talk; Mars Odyssey Orbiter, Gamma-Ray Spectrometer (GRS) Science Meeting, NASA; Sea Lodge, La Jolla, CA,
USA.

09.04.2003 **In-situ Geochemical Investigations of Planetary Surfaces using Compact Geochemistry
Packages;**
Talk; EGS-AGU-EGU, General Assembly 2003; Nice, France.

20.03.2003 **Geochemical Instrument Package Facility, Payload on Micro-Rover for "Mercury Surface
Element";**
Talk; Adlershofer Planetenseminar zum ESA Cornerstone BepiColombo; Deutsches Zentrum Luft- und
Raumfahrt (DLR), Berlin-Adlershof.