

Day-1 (6 Dec. 2018)

Talk No. Session 1: Hayabusa: sample curation and international AO results

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|----|---------------|---|
| 1 | 9:30 - 9:45 | From Hayabusa to Hayabusa2: Present status and plans of curatorial works for JAXA'S asteroidal sample return missions |
| 2 | 9:45 - 10:00 | Physical Properties of Silicate-Rich Regolith Particles from Itokawa Asteroid |
| 3 | 10:00 - 10:15 | Establishing Itokawa's water contribution to Earth |
| 4 | 10:15 - 10:30 | The origin of hydrogen in space weathered rims of Itokawa regolith particles |
| 5 | 10:30 - 10:45 | Synchrotron Nanoprobe Analysis of Space Weathered Itokawa Grains |
| 6 | 10:45 - 11:00 | Collisional fragmentation of an olivine-enstatite-rich Itokawa particle |
| 7 | 11:00 - 11:15 | Measuring Shock Stage of Itokawa and Other Asteroid Regolith Grains by Electron BackScattered Diffraction |
| 8 | 11:15 - 11:30 | U-Pb systematics of Hayabusa particles: Constrains on the thermal and impact histories of 25143 Itokawa |
| 9 | 11:30 - 11:45 | Itokawa, a >4.2 Ga old rubble pile asteroid |
| 10 | 11:45 - 12:00 | Itokawa chondrule fragment preserves evidence of proto-planetary disk processing |
| 11 | 12:00 - 12:15 | Searching for Volatiles in Space Weathered Grains |
| 12 | 12:15 - 12:30 | Preliminary results from sulfide Hayabusa particle RB-CV-0234 |

12:30 - 14:00 < Group Photo >, < Lunch >

14:00 - 15:30 < Poster session >

Session 2: Laboratory studies for carbonaceous asteroids

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| 13 | 15:30 - 15:45 | Exploring the potential of Xe+ Plasma FIB for minimum mass-loss sectioning of meteoritic analogs of coarse-grained (0.2-1 mm) asteroidal samples from the JAXA Hayabusa 2 sample return mission to asteroid Ryugu |
| 14 | 15:45 - 16:00 | Thermal Infrared Spectra of Heated CM and C2 Chondrites and Implications for Asteroid Sample Return Missions |
| 15 | 16:00 - 16:15 | The Jbilet Winselwan CM chondrite: an analogue for C-type asteroid sample return |
| 16 | 16:15 - 16:30 | Sulfide mineralogy of heated CM/CI-like chondrites as indicator of asteroidal processes |
| | 16:30 - 17:00 | < Discussion for the Day-1 >
<Curation Facility Tour> |

Day-2 (7 Dec. 2018)

Session 3: Hayabusa2: First light for Asteroid Ryugu

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| 17 | 9:30 - 9:50 | Operation Status of Hayabusa2 in the Proximity of Asteroid Ryugu |
| 18 | 9:50 - 10:10 | A reshaped rubble-pile asteroid Ryugu as observed by Hayabusa2 |
| 19 | 10:10 - 10:30 | The first detailed visible multi-band imaging observations of asteroid Ryugu |
| 20 | 10:30 - 10:50 | First Global Thermal Images of Asteroid 162173 Ryugu and Implications to Thermal Inertia, Grain Size and Roughness |
| 21 | 10:50 - 11:10 | Infrared spectra of asteroid 162173 Ryugu obtained by Near-infrared Spectrometer (NIRS3) |
| 22 | 11:10 - 11:30 | Scientific Evaluation on the Asteroid Ryugu in Hayabusa2 Landing Site Selection |
| 23 | 11:30 - 11:50 | MASCOT's first sight of Ryugu |
| 24 | 11:50 - 12:05 | Quick-look results for the surface/regolith mechanical properties of Ryugu based on MASCOT bouncing analyses |
| 25 | 12:05 - 12:20 | Brightness and Color Variations on the Surface of 162173 Ryugu: Space Weathering, Thermal Fatigue and Mass Movement |

Chair: T. Yada, D. L. Schrader

Toru Yada
Safoura Tanbakouei
Ziliang Jin
Luke Daly
Leon James Hicks
Falko Langenhorst
Michael Zolensky
Kentarō Terada
Fred Jourdan
Steven Reddy
Katherine D Burgess
Devin L. Schrader

Chair: H. Yabuta, H. Bates

Adrian J. Brearley

Helena Bates
Ashley J. King
Dennis Harries
Hisayoshi Yurimoto

Chair: M. Abe, J. Biele

Yuichi Tsuda [Invited]
Sei-ichiro Watanabe [Invited]
Seiji Sugita [Invited]
Tatsuaki Okada [Invited]
Moe Matsuoka [Invited]
Hikaru Yabuta [Invited]
David Hercik [Invited]
Jens Biele
Sho Sasaki

26 12:20 - 12:35 Gaussian deconvolution of the 2.7- μ m absorption band of type 1 and 2 carbonaceous chondrites for interpreting Hayabusa2 Near-Infrared Spectrometer (NIRS3) data Takahiro Hiroi

12:35 - 14:00 < Lunch >

Session 4: Experimental methods for samples returned by missions

Chair: C. Smith, T. Nakamura

27 14:00 - 14:15 Abrasion experiments of mineral and meteorite grains: Application to grain abrasion of Itokawa, Ryugu and lunar regolith Akira Tsuchiyama

28 14:15 - 14:30 Comparison of solar wind He implantation profiles between Genesis collectors separately implanted fast-speed flow, low-speed flow, and coronal mass ejection flow components Ken-ichi Bajo

29 14:30 - 14:45 Hayabusa2 sample recovery and phase-1 curation Masanao Abe

30 14:45 - 15:00 A perspective of Phase 2 Curation "Team Kochi" for Hayabusa2 returned sample: in-depth analysis of a single grain utilizing linkage microanalytical instruments Motoo Ito

15:00 - 15:20 < Coffee Break >

Session 5: Future missions for small (and not-small!) bodies

Chair: T. Okada, D. Hercik

31 15:20 - 15:40 DESTINY+: Flyby to Asteroid (3200) Phaethon and in-situ dust analyses Tomoko Arai [Invited]

32 15:40 - 16:00 Martian Moons eXploration (MMX) Tomohiro Usui [Invited]

33 16:00 - 16:20 HERACLES - The exploration of the Moon including sample return mission Yuzuru Karouji [Invited]

34 16:20 - 16:40 The OKEANOS: Small Body Exploration to a Jupiter Trojan Asteroid Motoo Ito [invited]

35 16:40 - 17:00 Project overview of CAESAR comet sample return mission Tomoki Nakamura [invited]

36 17:00 - 17:15 Mars Sample Return – How Should it be Organised Into Science Objectives? Caroline Smith

37 17:15 - 17:30 ASPECT hyperspectral imager for small interplanetary spacecrafts Tomas Kohout

17:30 - 18:00 < Discussion for the Day-2 > Hisayoshi Yurimoto

18:00 - 18:05 Adjourn LOC

POSTERS (From 6 to 7 Dec., 2018)

Poster No.

OA-P17	Effect of viscosity on propagation of MHD waves in astrophysical plasma	Alemayehu M. Cherkos
OA-P18	Ragged Phobos and coated Deimos: two satellites with various relations to the Roche limits	Gennady G. Kochemasov
OA-P19	In situ oxygen three-isotope analysis of carbonates with 15 μ m and 3 μ m beam: Preliminary results	Takayuki Ushikubo
OA-P20	Electrical properties of Itokawa grains returned by Hayabusa	Fabrice Cipriani
OA-P21	The boron isotopic composition of the implanted solar wind in Itokawa grains: Technical development	Ming-Chang Liu
OA-P22	Visualization on XCT data of Hayabusa samples: 3D printings and VR	Junya Matsuno
OA-P23	Advanced Curation Development of Tools and Methods for Microparticle Processing	Christopher J. Snead
OA-P24	A chain of events- from cosmic to terrestrial-leading to origin and development of the Homo genus	Gennady G. Kochemasov
OA-P25	The effect of possible contamination from sample holders on samples returned by Hayabusa2	Naoki Shirai
OA-P26	The NASA Cosmic Dust Collection: Current Status and Advanced Curation Planning	Marc D. Fries