

# NASA Mars Architecture Strategy Working Group (MASWG) Status

Bruce Jakosky (MASWG Chair)

Presentation to MEPAG Virtual Meeting

28 February 2020

# MASWG Charter

The tasks to be addressed are:

- Determine what could and should be done beyond (i.e., in addition to or after) the Mars Sample Return campaign.
- Survey the compelling science addressable by various classes of missions during the period 2020-2035, building on the science goals outlined in *Vision & Voyages* and updated in the *MEPAG Goals Document*.
- Define mission candidates in various mission classes to guide future MEP planning including, but not necessarily restricted to, missions in the small-spacecraft, Discovery, and New Frontiers categories, which may also be considered by the upcoming Planetary Decadal Survey (2023-2032).
- Define strategic technologies, infrastructure, and partnerships (international and commercial) that can enable compelling science in the specified time horizon, showing their programmatic linkage.

# MASWG Membership

- Bruce Jakosky, CU/LASP (chair)
- Shane Byrne, U. Arizona
- Wendy Calvin, U. Nevada Reno
- Shannon Curry, UC Berkeley
- Bethany Ehlmann, Caltech
- Jen Eigenbrode, NASA/GSFC
- Tori Hoehler, NASA/Ames
- Briony Horgan, Purdue
- Scott Hubbard, Stanford
- Tom McCollom, CU/LASP
- Jack Mustard, Brown U.
- Than Putzig, PSI
- Michelle Rucker, NASA/JSC
- Michael Wolff, Space Science Inst.
- Robin Wordsworth, Harvard U.
- Michael Meyer, NASA HQ
- Rich Zurek, Mars Program Office, JPL
- Serina Diniega, Mars Program Office, JPL

# Schedule and Status

- Overall schedule
  - Planning meeting, 21-23 October 2019
  - First in-person meeting, 28-30 January 2020 (delayed due to contract execution issues)
  - Second in-person meeting, planned 20-22 April 2020
  - Powerpoint presentation of preliminary results, expected May/June 2020
  - Full written version of final report, expected August 2020
- Status
  - “One-pagers” on mission concepts requested by end of November 2019; ~50 were submitted and discussed in detail at January meeting
  - Received briefings on key programmatic, technology, mission, science issues
  - Additional briefings to be conducted by telecon prior to next meeting

# Anticipated Vetting of Results

- Preliminary report (ppt version) to be released for input and feedback
  - External review by selected members of the Mars community (science, programmatic, engineering/technology)
  - Brief to Mars program at NASA HQ and JPL
  - Brief to MEPAG (probably via a virtual meeting + web mechanism to allow written feedback)
- Will provide written results to Planetary Decadal Survey Steering Committee and other relevant sub-committees