

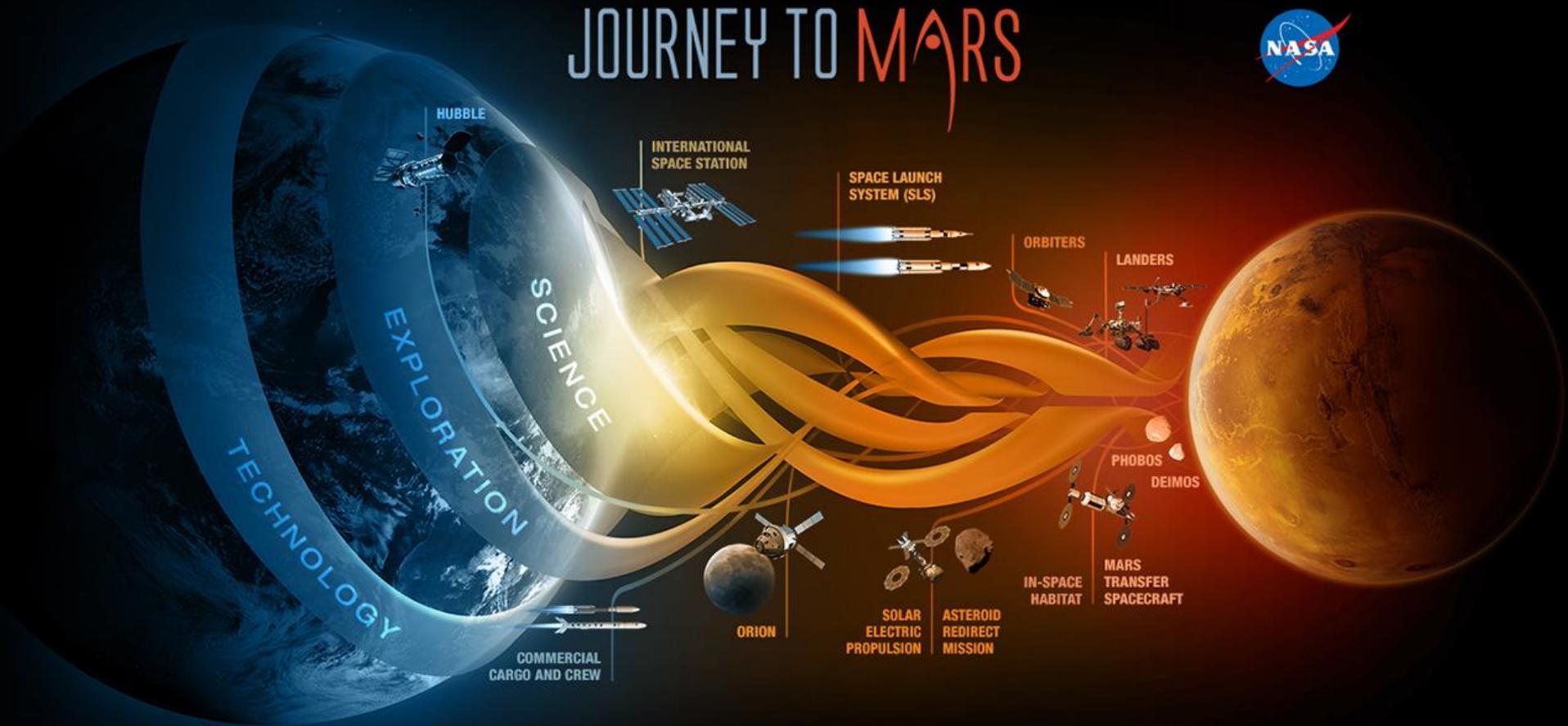


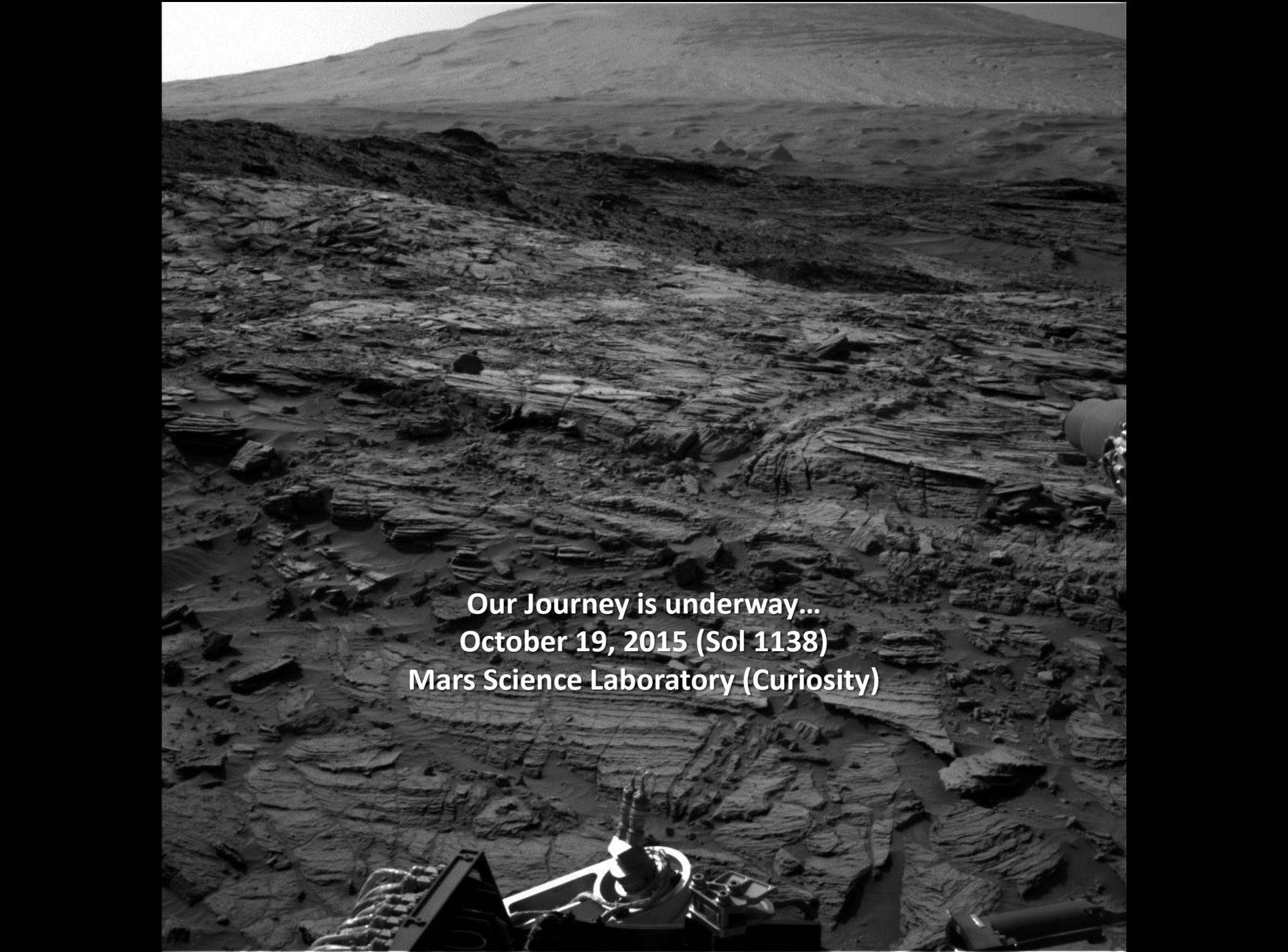
Open Innovation & Challenges at NASA

James E. Johnson - NASA

NASA'S JOURNEY TO MARS

Challenges on the Road to Mars



A black and white photograph of the Martian surface. The foreground and middle ground are dominated by dark, layered rock formations, likely sandstone, showing signs of erosion and sedimentation. The layers are roughly horizontal and vary in thickness. In the background, a large, rounded hill or mountain rises against a pale sky. The ground is covered in small rocks and pebbles. In the lower center, the top of the Mars Science Laboratory rover is visible, showing its solar panels and various instruments. The overall scene is desolate and rocky.

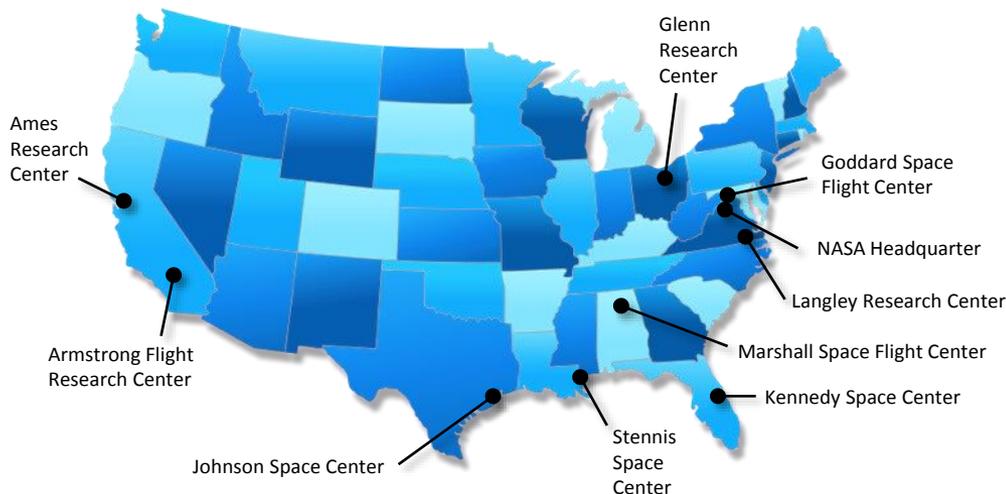
**Our Journey is underway...
October 19, 2015 (Sol 1138)
Mars Science Laboratory (Curiosity)**



NASA's Center of Excellence for Collaborative Innovation (CoECI)



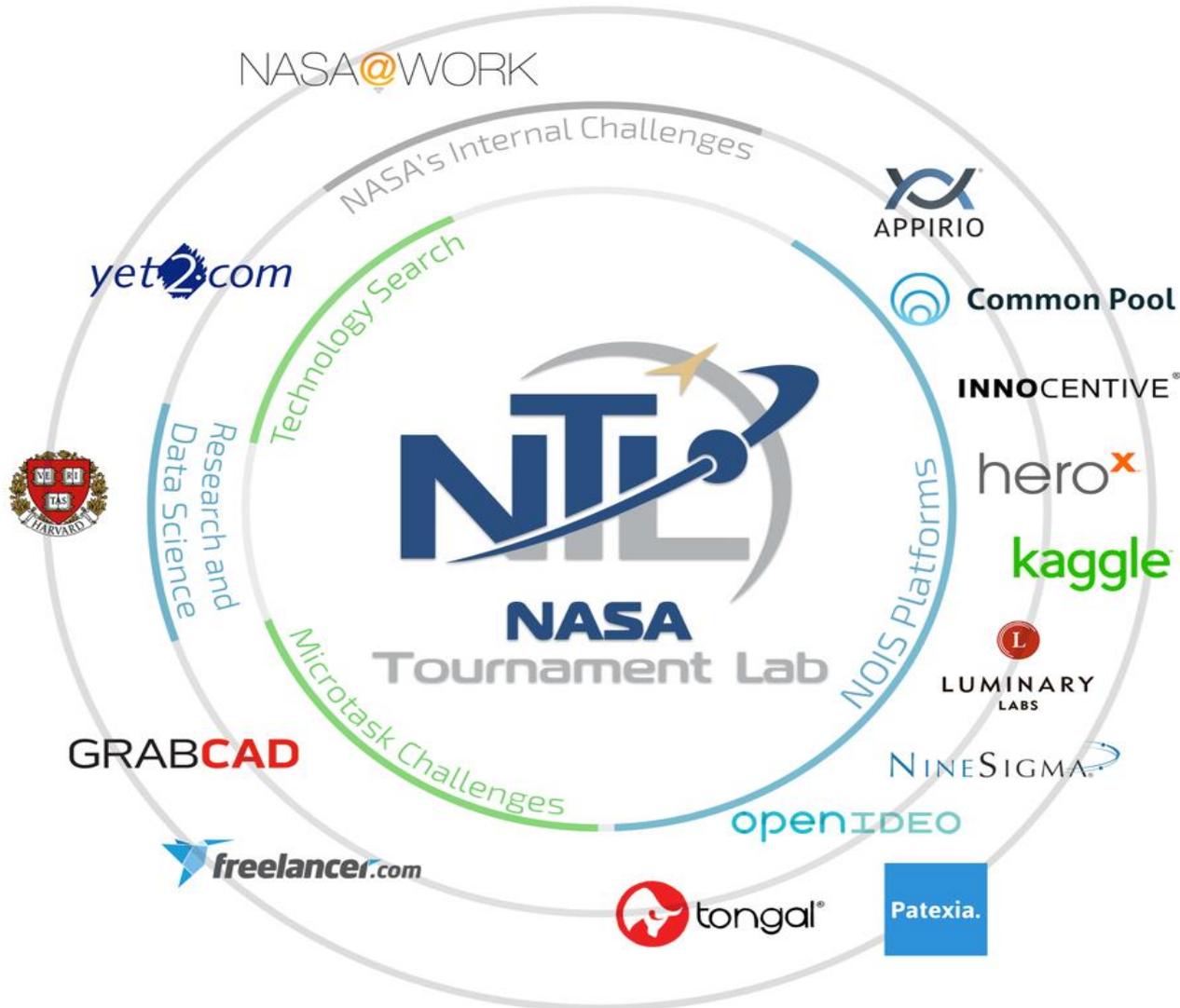
- The **Center of Excellence for Collaborative Innovation (CoECI)** was officially launched in November of 2011 at the request of the White House OSTP.
- **CoECI** works across all of NASA and with other federal agencies to infuse crowdsourcing methods as a set of available tools to create innovative, efficient, and optimal solutions to real world problems.



- **Other NASA Crowd-Based/Challenge Programs**
 - **NASA Centennial Challenges** – Similar to X-Prize competitions
 - **SpaceApps, Education & Citizen Science Challenges**



CoECI Toolkit: The NTL



Panel Discussion: Open Innovation & Challenges at NASA

NASA Tournament Labs & Open Innovation at Harvard

- Mr. Jin Paik, Director of Project and Research Development

NASA's Mars Balance Challenge & Lessons Learned

- Mr. James E. Johnson, NASA Systems Innovator & Mars Balance Challenge Lead

NASA Centennial Challenges

- Mr. Eric Eberly – Deputy Project Manager of NASA Centennial Challenges

NASA'S JOURNEY TO MARS