

Science AMA Series: We're NASA space communications engineers working on technology for the interplanetary internet – Ask Us Anything!

NASAEarthRightNow¹ and r/Science AMAs¹

¹Affiliation not available

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Abstract

Hi, we're NASA engineers working on space communications technologies that will help create an interplanetary internet. When data travels vast distances like the 30+ million miles to Mars, the potential for delay or disruption is significant! Network disruption in space can happen because of limited contact time and atmospheric effects. NASA communications technology called 'disruption-tolerant networking' (DTN) allows for temporary disruptions and long delays, unlike the familiar computer to computer IP connection. DTN can also provide tremendous benefits to missions closer to Earth and terrestrial applications. That's what we're working on, and it has the potential to improve data transmission for virtually all of NASA's missions. We are: Vint Cerf, Distinguished Visiting Scientist, NASA's Jet Propulsion Laboratory Dave Israel, Exploration and Space Communications Architect, NASA's Goddard Space Flight Center Adam Schlesinger, Technical Lead, Advanced Exploration Systems Delay/Disruption Tolerant Networking Project, NASA's Johnson Space Center Scott Burleigh, Principal Engineer, NASA's Jet Propulsion Laboratory Kelvin Nichols, International Space Station ground systems engineer, NASA's Marshall Space Flight Center Dr. Keith Scott, The MITRE Corporation For more information on disruption-tolerant networking, visit: <https://www.nasa.gov/content/dtn> Don't forget to follow us on Twitter at @NASA_TDRS, @NASALasercomm and @NASASCaN!

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We are:

Vint Cerf, Distinguished Visiting Scientist, NASA's Jet Propulsion Laboratory

Dave Israel, Exploration and Space Communications Architect, NASA's Goddard Space Flight Center

Adam Schlesinger, Technical Lead, Advanced Exploration Systems Delay/Disruption Tolerant Networking Project, NASA's Johnson Space Center

Scott Burleigh, Principal Engineer, NASA's Jet Propulsion Laboratory

Kelvin Nichols, International Space Station ground systems engineer, NASA's Marshall Space Flight Center

Dr. Keith Scott, The MITRE Corporation

For more information on disruption-tolerant networking, visit: <https://www.nasa.gov/content/dtn> Don't forget to follow us on Twitter at @NASA_TDRS, @NASALasercomm and @NASASCaN!

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