



The Sound of Space

EP. 2 - LIFE IN SPACE: WHAT WOULD IT TAKE?

Brought to you by the University of Toronto Aerospace Team (UTAT)

01:20 Unique challenges to extraterrestrial colonization

- [1] Al Global, "Space Settlement Basics," *National Space Society*. [Online]. Available: <https://space.nss.org/settlement/nasa/Basics/wwwwh.html>.
- [2] L. Herridge, "NASA Plant researchers Explore Question of Deep-Space Food Crops," *John F. Kennedy Space Center*, 17-Feb-2016. [Online]. Available: <https://www.nasa.gov/feature/nasa-plant-researchers-explore-question-of-deep-space-food-crops/>.
- [3] M. Wall, "Nuclear Reactor for Mars Outpost Could Be Ready to Fly by 2022," *Space.com*, 12-Aug-2019. [Online]. Available: <https://www.space.com/nuclear-reactor-for-mars-outpost-2022.html>.
- [4] P. S. Anderson, "Plants sprout - and die - on moon," *EarthSky*, 22-Jan-2019. [Online]. Available: <https://earthsky.org/space/plants-seeds-sprout-die-moon-change4/>.
- [5] NASA, "Veggie," *John F. Kennedy Space Center*, Jan-2020. [Online]. Available: https://www.nasa.gov/sites/default/files/atoms/files/veggie_fact_sheet_508.pdf
- [6] R. Hollingham, "Why a German lab is growing tomatoes in urine," *BBC*, 08-Mar-2017. [Online]. Available: <https://www.bbc.com/future/article/20170308-why-a-german-lab-is-growing-tomatoes-in-urine/>.

23:05 Terraforming

- [7] J. Strickland et al., "Roadmap to Space Settlement," *Ad Astra*, vol. 30, no. 5, 2018. [Online]. Available: <https://space.nss.org/nss-roadmap-to-space-settlement-3rd-edition-2018-contents/>.
- [8] B. Steigerwald and N. Jones, "Mars Terraforming Not Possible Using Present-Day Technology," *NASA Goddard Space Flight Center*, 30-Jul-2018. [Online]. Available: <https://www.nasa.gov/press-release/goddard/2018/mars-terraforming/>.
- [9] J. Mehta, "Can We Make Mars Earth-Like Through Terraforming?," *The Planetary Society*, 19-Apr-2021. [Online]. Available: <https://www.planetary.org/articles/can-we-make-mars-earth-like-through-terraforming/>.
- [10] E. Carson, "Terraforming Mars might be impossible...for now," *CNET*, 02-Mar-2020. [Online]. Available: <https://www.cnet.com/features/terraforming-mars-might-be-impossible-for-now/>.

29:43 Business case for colonization

- [11] "About blue," *Blue Origin*. [Online]. Available: <https://www.blueorigin.com/about-blue/>.

- [12] J. Wattles, "Colonizing Mars could be dangerous and ridiculously expensive, Elon Musk wants to do it anyway," *CNN Business*, 08-Sep-2020. [Online]. Available: <https://www.cnn.com/2020/09/08/tech/spacex-mars-profit-scq/index.html>.

- [13] "Study to Assess the Feasibility of Establishing a Svalbard Arctic Seed DEpository for the International Community," *Center for International Environment and Development Studies (Noragric), Agricultural University of Norway & Nordic Gene Bank*, 14-Sep-2004. [Online]. Available: https://www.regjeringen.no/globalassets/upload/lmd/kampanjesvalbard/vedlegg/frohvelv_study_to_assess.pdf.