

December 2, 2015  
MSE 2101 topics

- Titan
  - size, atmosphere and temperature
  - but *why* atmosphere? It's a moon, and it's far away!
  - Voyager 2: a smoggy moon
  - composition of the moon, composition of the atmosphere
  - Cassini + Huygens: Titan is Earth-like!
- Wait, Earth-like? Liquid, boulders, volcanoes, dirt, dunes
- Life on Titan?
- The concept of a habitable zone
- Will Earth freeze or burn if it moved  $\pm 1$  mile?
- Being in the habitable zone does not guarantee habitability
- Habitable zones evolve
- If life was found on Europa, would that change our perception of the habitable zone?
- Are Venus, Earth and Mars in the habitable zone?