

November 20, 2020
MSE 2101 topics

- Fermi's paradox – the premise
- How old are other civilizations?
 - Drake's equation to the rescue!
 - If 1 in 1 million stars hosts a civilization... ?
 - If 1 in 100 million stars hosts a civilization... ?
 - The implication of the rate of civilizations popping up
- Von Neumann machines
- How long does it take to colonize a Galaxy?
 - the Coral model
 - At 10% of the speed of light, with 150 year breaks: 0.01c
 - At 1% of the speed of light, with 5000 year breaks: 0.001c
- Would the Galaxy be colonized?
 - is reducing the population pressure a viable reason?
- Possible solutions to the Fermi paradox
 - we are alone
 - civilizations are out there, but no colonization
 - too difficult?
 - socially unattractive?
 - self-destruction?
 - Galaxy is colonized, we just don't know it
- Revenge time! :)