

Astronomy 230

Section 1 – MWF 1400-1450
106 B1 Eng Hall



This Class (Lecture 32):

Brad Rockwell
Sean Boyer
Patrick Sawica

HW #6 is due on Nov 19th!

Next Class:

Dan Kirsoroff
Adam Wold
Lynn Nguyen

Music: *The Universe is You* – Sophie Ellis-Bextor

Nov 10, 2004

Astronomy 230 Fall 2004

L.W. Looney

Drake Equation



= 69,525

Civilizations



$$N = R_* \times f_p \times n_e \times f_l \times f_i \times f_c \times L$$

# of advanced civilizations we can contact	Rate of star formation	Fraction of stars with planets	# of Earthlike planets per system	Fraction on which life arises	Fraction that evolve intelligence	Fraction that communicate	Lifetime of advanced civilizations
25	0.34	.396	0.54	.425	0.9	100000	
stars/yr	systems/star	life planets/system	life/planet	intelligence/life	life/comm.	years	

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Write down the Drake equation and a personal estimate on the number of civilizations with which we can communicate today. For each term write 2-4 sentences on why you picked the value. You **must** give reasons from class (facts) in order to get credit for the value. Try to comment on the limits (upper and lower) of the term? What are they? Why? Do you think the term is well known, based on class discussions? Why or why not?

Compare your result with HW #1 and class value.

Nov 10, 2004

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