

**SAS Honors Seminar 256:  
Extraterrestrial Life**

**11/10/2011**

# Results: Mars vs. Europa vs. Titan

## 2011 student preferences:

**Mars: 7** (Baltej, Ben, Laura, Matt, Mohammad, Nora, Sid)

**Europa: 4** (Austin, Joey, Lauren, Yael)

**Titan: 1** (Jade)

## 2008 student preferences:

**Mars: 2** (Corey, Luke)

**Europa: 9** (Chris, Desiree, Eric, Jessica, Joey, Kelly, Nauman,  
Paul, Samantha)

**Titan: 1** (Salman)

# Due Tuesday (11/15)

## Response paper #8:

Every year, Nobel Prizes are awarded to recognize outstanding accomplishments in the areas of physics, chemistry, physiology or medicine, literature, peace, and economics. Are there particular high-profile discoveries related to astrobiology that— *if* they were made in the future— you feel would (or would not) be appropriately recognized by Nobel Prizes?



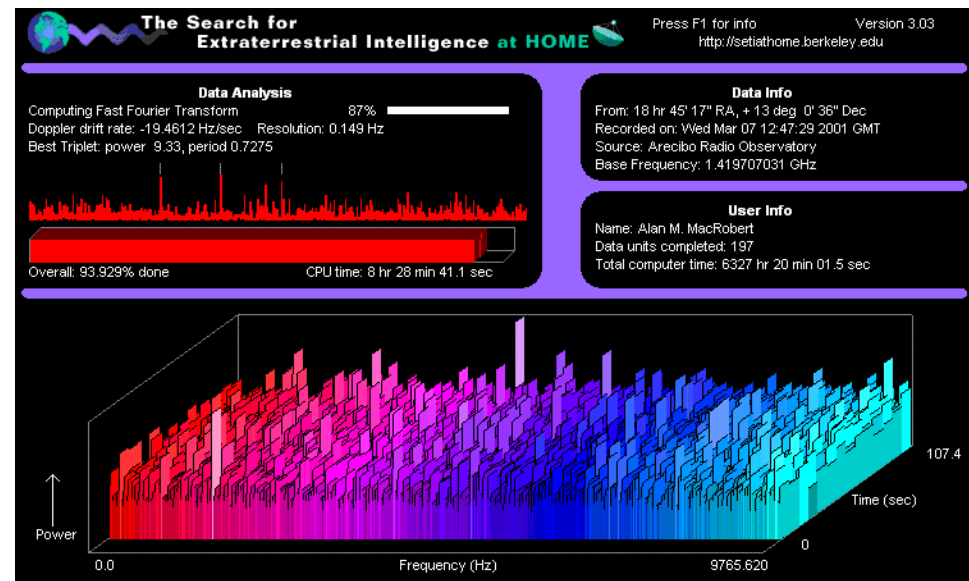
# Reading for Tuesday (11/15)

**Bennett & Shostak 12.3 – SETI**

**(Search for Extraterrestrial Intelligence)**

**Alexander & Anderson (2007), Alexander (2008, 2009):  
SETI@home, a new search strategy, and SERENDIP V**

**Blair (2009) &  
Pierson (2011):  
the Allen  
Telescope Array**

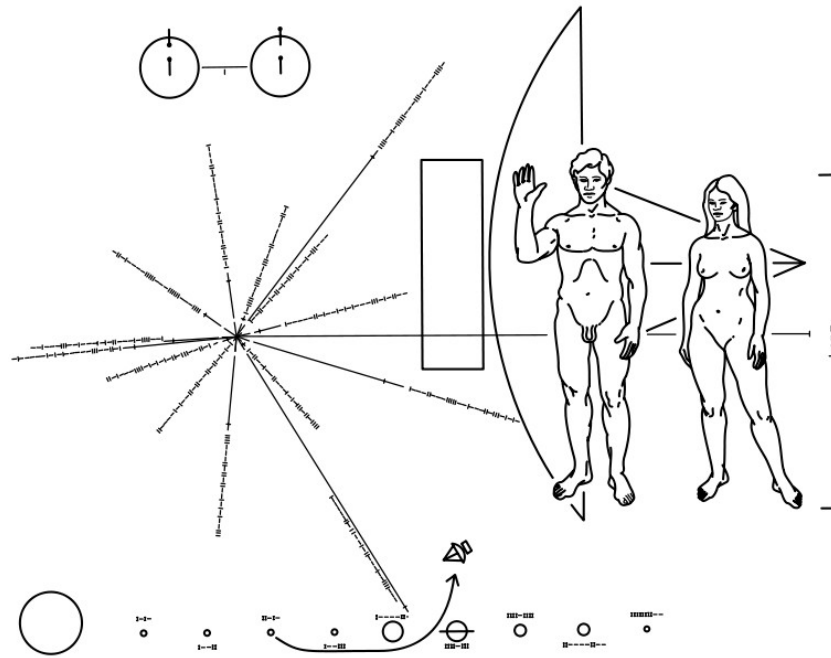


# Sending messages to the cosmos?

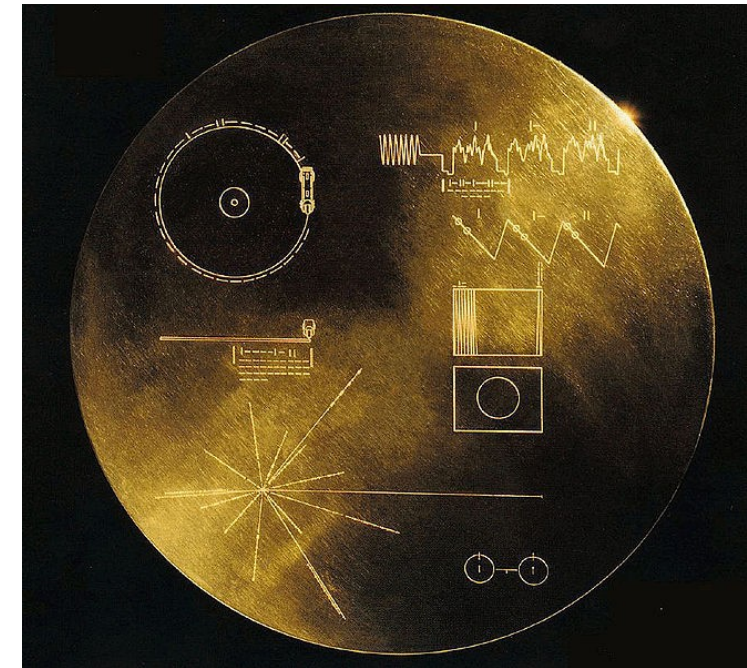
**Electromagnetic... and physical!**



**Arecibo message**



***Pioneer 10 & 11* plaques**



***Voyager 1 & 2* records**

# Due Monday after next (11/22)

## Response paper #9:

The Arecibo Message, the *Pioneer* Plaques, and the *Voyager* Golden Records are three examples of **deliberate** efforts to communicate with extraterrestrial civilizations. Assess the effectiveness of one or more of these communications, and describe what information you feel our next such electromagnetic or physical message to the cosmos should contain.

# End-of-semester scheduling

**11/29 Final selection of “student choice” topics.**

**Last response paper due.**

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**12/6 Class 26: student choice #1**

**Topic, scope, draft reference list for term paper due.**

**12/8 Class 27: student choice #2**

**12/13 Class 28: four-way discussion of the Drake equation**

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**12/23 Term paper due (by email).**

# Easter Island: treeless landscape





# Different components of “moai”



# Lithic mulching



# Protective “manavai” + endangered tree



# Rano Kau crater = haven for biodiversity

