Fort Lewis College

Colorado Space Grant Consortium 2013 Annual Meeting

Charles Hakes
Fort Lewis College

- Fall robotics workshop
- Spring robotics challenge
- Summer balloon launch
- Observatory update
Statistics

- total participants: 15
- female: 4
- underrepresented: 3
Fall Robotics Workshop
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Spring Robotics Challenge

- Several students very interested after Workshop, but without more credit, no follow through with participation.
- Several students from last year’s team revived “big bot” (for the third time)
- One new student (with help) built “peanut” the night before the event
- Beacon simulator still works
Spring Robotics Challenge
Summer Balloon Launch

- Team Skyhawk
  - Adam Baker
  - John Naglak
  - Alexa Flores
  - Lars Burnham

- Primary Objectives
  - Payload Monitoring System
    - record battery voltage and current(s)
    - record and regulate temperature
    - record GPS and acceleration (payload 0)
  - Supported “payload” of multiple Geiger tube system
3-D Printer
Summer Balloon Launch
Summer Balloon Launch
External monitoring

Geiger Counter

PMS and HS

Accelerometer and GPS

System SD card

Geiger Counter Tubes

batteries

Geiger counter (β)

On switch

Geiger counter (β&γ)

External monitoring LEDS
PMS Performance

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Heating System
Geiger Data

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FLC Observatory
FLC Observatory

- Web Site
  - [http://www.fortlewis.edu/observatory/](http://www.fortlewis.edu/observatory/)

- Remote Ops

- Wide Angle and Time Lapse
  - [http://www.youtube.com/watch?v=Zi0nbEpWieo](http://www.youtube.com/watch?v=Zi0nbEpWieo)
FLC Observatory
Spring Break Activities
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Spring Break Activities

• https://www.youtube.com/watch?v=cVoVjGSTAT0DM
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Questions