PARENT & SON EVENING UNDER THE STARS
NOVEMBER 8, 2013
# Parent & Son Evening Under the Stars

**November 8, 2013**

### Agenda

**Guest Speaker:** Joe Polizzi, III, JWST S&OC Systems Development Manager, STScI

<table>
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<th>Time</th>
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| 6:00 p.m. | Registration and Dinner Reception  
(Rear Lobby/Café)          |
| 6:30 p.m. | Introduction - Tania Anderson  
(Auditorium)               |
| 6:35 p.m. | Science Talk: Joe Pollizzi  
"Engineering the Ground System for the JWST - or  
What We Need to Do on the Ground to Take Those  
Beautiful Pictures in the Sky“  |
| 7:15 p.m. | Break                                                                |
| 7:20 p.m. | Career Hands-on Activity - Tania Anderson  
(Auditorium)            |
| 7:55 p.m. | Closing Remarks - Tania Anderson                                   |
| 8:00 p.m. | Morris W. Offit Telescope Tour  
Star Observation - Lucy Albert/Vanessa Thomas  
(Garage rooftop)        |

**Space Telescope Science Institute**
Engineering the Ground System for the JWST

“What we need to do on the Ground to take those beautiful pictures in the sky”

Joe Politi
November 3, 2013

Spica Telescope Science Institute
Engineering the Ground System for the JWST
or
“What we need to do on the Ground to take those beautiful pictures in the sky”

Joe Pollizzi

November 8, 2013

Space Telescope Science Institute
What's the deal with Infrared Light?

visible light

infrared light
What are we starting with?

- Raw images taken from HST using the Wide Field Channel of ACS

- The two parts of the image are of the 2 detector chips in the ACS – and they do not overlap

- Note the noise throughout the image and the trail on the left hand side
How does one get to my job

First a clarification of the difference between a “Scientist” and an “Engineer”

**scientist**

*noun* \(\text{si-en-tist}\): a person who is trained in a science and whose job involves doing scientific research or solving scientific problems

**engineer**

*noun* \(\text{en-gi-neer}\): a person who has scientific training and who designs and builds complicated products, machines, systems, or structures: a person who specializes in a branch of engineering