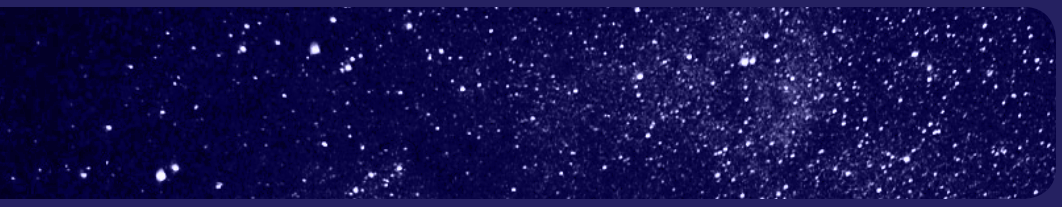

CALTECH Astronomy
information architecture & site redesign

GPHD 135 • Section 02 • Spring 2008

Andrew Lugonja

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introduction

problem statement

The project goal is to redesign an existing web site and improve upon its information architecture. The reconstruction of the architecture is supported by a series of user questions and tests. A profile is taken of the user and they are either subjected to a card sorting test or a live site usability test. Once the testing is complete and all user suggested modifications are recorded, the information can be applied to the design of a new interface for the existing web site.

the client

CALTECH has an astronomy department at the school. The school is in the center of several observatories and astronomical laboratories in Southern California. They also have ties with several other observatories throughout the world. Their web site is in need of a complete overhaul. It is a source of information for students and locals interested in taking classes and learning about local resources.

objectives

The final site needs to organize and clearly provide the requested information. The site should be able to provide information on the department, local resources, research opportunities, observatories, and the school's local events.

- Department: student, faculty, alumni, researchers, and academics related items
- Local Resources: library, computer use, lab reservations, images
- Research: groups, clubs, surveys
- Observatories: links to different telescopes around the world
- Events: talks, seminars, lunches, colloquials

target audience

The site should cater to users of all ages interested in astronomy. Though the main focus is on college students, astronomy teachers, and adults interested in furthering their knowledge in astronomy through the school's resources. The average person is between the ages of 18 and 30 years old, more often male, and having a large interest in astronomy. For the most part the audience is located in or around Southern California, within driving distance to the campus.

information listings

The following is a listing of the requested information to be included in the site reconstruction and design.

Department: faculty, researchers, staff, post docs, grad students, visitors, alumni, and contacts

Academics: classes, admissions, catalog, calendars, committees

Observatories: links to Palomar, Keck, CARMA, OVRO, Chajnantor, TMT, RDRO, and CSO

Research: centers, laboratories, clubs, groups, and surveys

Events: talks, colloquials, seminars, lunches, and club schedules

Resources: library, computers, lab reservations, pictures, web camera, postdoctoral association, and miscellaneous information

Search

* * * * *

information architecture

0.0 Home Page

1.0 Meet the Department
- 1.1 Faculty
- 1.2 Researchers
- 1.3 Staff
  - 1.3.1 Robinson
  - 1.3.2 Caltech Optical Observatories/COO
  - 1.3.3 Radio/OVRO
- 1.4 Postdocs
- 1.5 Grad Students
- 1.6 Visitors
- 1.7 Alumni
  - 1.7.1 Graduate Student alumni
  - 1.7.2 Prize Postdoctoral alumni
- 1.8 E-mail Aliases

2.0 Observatories (links to outside sites)
- 2.1 Palomar
- 2.2 Keck
- 2.3 CARMA
- 2.4 OVRO
- 2.5 Chajnantor
- 2.6 TMT
- 2.7 RDRO
- 2.8 CSO

3.0 Academics
- 3.1 Classes this term
- 3.2 Graduate Admissions
- 3.3 Course Catalog
- 3.4 Academic Calendars
- 3.5 Faculty Committees

4.0 Research Activities
- • IPAC - The Infrared Processing and Analysis Center
- • TAPIR - The Caltech Theoretical Astrophysics and Relativity Group
- • SRL - The Space Radiation Laboratory
- • LIGO - The Laser Interferometer Gravitational Wave Observatory
- • Submillimeter Wave Astrophysics
- • Moore Center for Theoretical Cosmology and Physics
- • The Infrared Army
- • Observational Cosmology
- • Michelson Science Center
- • Planetary Astronomy
- • Carnegie Observatories
- • CBI - The Cosmic Background Imager
- • COSMOS - Nick Scoville's Cosmic Evolution Survey with HST
- • DPOSS - The Digitized Palomar Observatory Sky Survey
- • POSS-II - The Second Palomar Observatory Sky Sur-vey
- • Palomar-Quest - The Palomar Quest Sky Survey
- • The Pulsar Group

5.0 Events
- 5.1 Talks this week
- 5.2 Astronomy Colloquia
- 5.3 Tea talk schedule
- 5.4 Theoretical astrophysics seminars
- 5.5 Physics Colloquia
- 5.6 IPAC lunch talks
- 5.7 IR/Submm/Mm Sack Lunch
- 5.8 Carnegie Colloquia and Lunch Talks
- 5.9 OVRO group meetings and talks
- 5.10 Journal Club schedule

6.0 Local Resources (links to outside sites)
- 6.1 Astro Library
- 6.2 Computer documentation
- 6.3 Department car
- 6.4 Robinson 023 reservations
- 6.5 Robinson 106 reservations
- 6.6 Robinson visitor office reservations
- 6.7 Pictures of Robinson hall

7.0 Public Outreach
- • Cahill web camera
- • The Big Picture
- • Sedna - Information
- • Caltech Postdoctoral Association
- • Astronomical Images from Palomar

8.0 Search

user profile questions

Every user was given a profile questionnaire in order to better understand their background and familiarity with the internet and astronomy. The first five user profiles correspond with the card sorting test, while the second five pertain to the live task test.

Are you male of female?
- male
- female

What is your age group?
- 13-19
- 20-26
- 27-33
- 34-40
- 41-above

How long have you been using the internet?
- never
- under 3 years
- 4-7 years
- 8 years or more

Were you aware that CalTech University had an Astronomy / Astrophysics Department?
- yes
- no

What is your interest level in Astronomy / Astrophysics?
- none at all
- little
- some
- a lot

Have you ever been to an observatory?
- no
- once or twice
- many times

Have you ever heard of Keck Observatory?
- yes
- no

If you answered yes to the previous question, are you familiar with its location?
- Los Angeles
- South America
- Hawaii

Have you ever taken an Astronomy / Astrophysics class in college?
- yes
- no

If you answered yes to the previous question, did you enjoy the class?
- no
- somewhat
- very much

results

There were four males and one female for the card sorting test.

First male: 20-26 years old, 4-7 years on the internet, aware of CALTECH Astronomy department, been to many observatories, lot of interest in astronomy, heard of Keck and knew location, taken a class and enjoyed it very much.

Second male: 20-26 years old, 8 plus years of internet, unaware of department, some interest in astronomy, never been to an observatory, not heard of Keck, taken class and enjoyed somewhat.

Third male: 20-26 years old, 8 plus years of internet, unaware of department, little interest, never been to observatory, not heard of Keck, not taken astronomy.

Fourth male: 20-26 years old, 8 plus years of internet, unaware of department, some interest in astronomy, been to observatory once or twice, has heard of Keck but not familiar with its location, has taken and astronomy class and enjoyed it somewhat.

First female: 27-33 years old, 4-7 years of internet, aware of department, little interest in astronomy, been to an observatory once or twice, never heard of Keck, has taken a class and enjoyed it somewhat.

results continued

There were two males and three female for the live task test.

First male: 20-26 years old, 4-7 years on the internet, aware of CALTECH Astronomy department, never been to an observatory, no interest in astronomy, not heard of Keck, and not taken a class.

Second male:34-40 years old, under 3 years of internet, aware of department, some interest in astronomy, been to observatory once or twice, heard of Keck and knew its location, taken a class and enjoyed it very much.

First female: 27-33 years old, 8 plus years of internet, unaware of department, no interest in astronomy, never been to an observatory, heard of Keck but unfamiliar with its location, and not take an astronomy class.

Second female: 27-33 years old, 8 plus years of internet, aware of department, a lot of interest in astronomy, heard of Keck but unfamiliar with its location, taken astronomy class and enjoyed it very much.

Third female: 13-19 years old, under 3 years of internet, unaware of department, little interest in astronomy, never been to an observatory, not heard of Keck, and not taken a class.

*****

user card sorting results

Five users completed the card sorting test, where each person was given the current site architecture written out on index cards and random order. They were then asked to place the cards in the categories they felt made the most sense. There were seven categories with sixty links that belonged among them. The results for the five users are as follows.

First male

Meet the Department - grad students, researchers, faculty, visitors, alumni, staff, post docs, e-mail

Academics - caltech postdoc assoc, academic calendar, graduate admissions, classes, course catalog

Observatories - tmt, keck, ovro, palomar, carma, chajnantor, rdro, cbi

Research Activities - astro relativity group, astro colloquia, physics colloquia, observational cosmology, submillimeter wave astro, planetary astro, palomar-quest, theoretical astro seminar, cosmos, dposs, poss-ii, infrared army, sedna info, pulsar group

Events - journal club, talks week, tea talk, carnegie colloquia, ir/submm, ipac talks, ovro group
Local Resources - laser interferometer, pics of Robinson hall, computer docs, space radiation lab, infrared processing center, Moore center, big picture, department car, michelson science, astro library

Public Outreach - Robinson visitors, astro images, Robinson 106, carnegie observations, Robinson 23, cahill webcam

This user did fairly well on the card sorting test. He was able to get 8 out of 8 on the meet the department, 4 of 5 in academics, 7 of 8 observatories, 7 of 10 in events, 11 of 17 in research activities, 4 of 7 in local resources, and 1 of 5 in public outreach. The user is very familiar with astronomy according to his profile sheet.

Second male

Meet the Department - observation cosmology, planetary astronomy, infrared army, researchers, pulsar group, caltech post doc assoc, faculty, grad admissions, staff

Academics - pictures of Robinson hall, classes, alumni, grad students, course catalog

Observatories - carnegie observatories, palomar, rdro, keck, tmt, chajnantor, ovro, carma, Robinson 23, Moore center

Research Activities - postdocs, dposs, laser interferometer, grav wave center, palomar-quest, cosmos, cosmic survey, poss-ii, physics colloquia, submm, wave

Events - ir/submm/mm lunch, theoretical seminar, journal club, academic calendar, talks, ovro group, carnegie colloquia, tea talk

Local Resources - visitors, Robinson office, Robinson 106, big picture, department car, astro images, space radiation lab, infrared center, michelson center, astro library, cbi, e-mail, sedna info

Public Outreach - ipac lunch, computer docs, astro colloquia, cahill webcam, theoretical astro

This user did not do very well on the test. His results were 3 of 8, 2 of 5, 7 of 8, 6 of 10, 7 of 11, 4 of 7, and 1 of 5. The user was not familiar with astronomy.

Third male

Meet the Department - department car, observational cosmology, space radiation lab, infrared army, planetary astro, astro colloquia, staff, submilimeter wave, physics colloquia

Academics - course catalog, grad students, faculty, grad admissions, classes

Observatories - rdro, palomar, carnegie, carma, chajnamtor, tmt, keck, ovro

results continued

Research Activities - big picture, Robinson 23, palomar-quest, dposs, poss-ii, cosmos

Events - tea talk, carnegie colloquia, ovro group, talks, academic calendars, journal club, ir/submm, ipac lunch, theoretical astro, alumni

Local Resources - cbi, astro library, infrared process, michelson center, astro images, researchers, computer docs, laser interferometer, postdocs, sedna info, e-mail, Moore center

Public Outreach - pics of Robinson hall, Robinson 106, Robinson visitors, visitors, theoretical astro, cahill webcam, caltech post doc assoc, pulsar group

This user did not do very well on the test. His results were 1 of 8, 3 of 5, 6 of 8, 4 of 10, 7 of 11, 2 of 7, and 1 of 5. The user was not familiar with astronomy.

Fourth male

Meet the Department - graduate admissions, course catalog, staff, grad students, alumni, sedna info, e-mail, faculty

Academics - submm wave, classes, physics colloquia, Moore center, poss-ii, cosmos, palomar-quest

Observatories - infrared army, big picture, postdocs, computer docs, dposs

Research Activities - astro colloquia, observ cosmology, planetary astro, carnegie observ, researchers

Events - theoretical astro, journal club, visitors, Robinson 106, Robinson visitors, ipac lunch, ir/submm/mm lunch

Local Resources - carma, ovro, chajnantor, tmt, astro library, rdro, michelson center, palomar, keck, cbi, infrared center, space radiation lab, academic calendars, astro images, laser interferometer, department car, pics of Robinson hall, cahill webcam

Public Outreach - theoretical astro, Robinson 23, caltech postdoc assoc, pulsar group, tea talk, carnegie colloquia, ovro group, talks

This user did not do very well on the test. His results were 4 of 8, 1 of 5, 0 of 8, 0 of 10, 4 of 11, 3 of 7, and 0 of 5. The user was not familiar with astronomy.

First female

Meet the Department - visitors, grad admissions, faculty, department car, researchers, grad students, staff, alumni

Academics - cosmos, poss-ii, big picture, dposs, Robinson 23, theoretical astro, caltech postdoc, astro colloquia, planetary astro, Robinson 106, postdocs, classes, observ cosmology

Observatories - ovro, keck, tmt, chajnantor, carma, palomar, rdro, michelson center, cahill web cam, carnegie observation

Research Activities - Robinson visitors, infrared army, space radiation, infrared center, astro library, cbi, submm wave, computer docs, astro images, ovro talks, pulsar group

Events - talks, ipac, journal club, ir/submm, carnegie colloquia, tea talk

results continued

Local Resources - sedna info, laser interferometer, theoretical astro, Moore center

Public Outreach - palomar-quest, e-mail, pictures of Robinson hall, physics colloquia, course catalog, academic calendar

This user did not do very well on the test. His results were 5 of 8, 1 of 5, 7 of 8, 4 of 10, 6 of 11, 0 of 7, and 0 of 5. The user was somewhat familiar with astronomy.

* * * * *

user live task results

The user live task test consisted of ten tasks the user needed to perform on the existing web site. They all related to navigating the web site correctly. Each task was orally given to the user and their reactions were documented. If the observed action matched the expected, then the user got that task correct. If the observed action differed from the expected then their first reaction was documented and an extra click was added for each mistake. Most users were able to get the expected action with one extra click on a few tasks on average.

required tasks

Find the page that links to Keck Observatory. (1 clicks)

Find the hours in which you could visit the Astronomy Department. (2 clicks)

Find the area where you can view pictures of the main hall. (2 clicks)

Find the location for information on postdoctoral alumni. (3 clicks)

Find the bluebook article on the CalTech Submillimeter Observatory. (1 clicks)
Find the list of teachers at CalTech's Astronomy Department. (2 clicks)

Find the link for the Pulsar Group. (2 clicks)

Find the area for Weekly Talks. (2 clicks)

Find the link to reserve the Department Car. (3 clicks)
Find the Search Page. (1 clicks)

task averages

All five users were able to get the first task correct, an average of 100%.

Four out of five users got task two correct, an average of 80%.

Four out of five users got task three correct, an average of 80%.

Three out of five users got task four correct, an average of 60%.

Four out of five users got task five correct, an average of 80%.

Four out of five users got task six correct, an average of 80%.

Three out of five users got task seven correct, an average of 60%.

Four out of five users got task eight correct, an average of 80%.

Four out of five users got task nine correct, an average of 80%.

Five out of five users got task ten correct, an average of 100%.

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user live task data

user one: first male

task	expected action	observed action
Find the page that links to Keck Observatory.	Observatories > Keck (1 – 2 clicks)	correct
Find the hours in which you could visit the Astronomy Department.	Academics > Visitors (2 clicks)	correct
Find the area where you can view pictures of the main hall.	Local Resources > Pictures of Robinson Hall (2 clicks)	clicked meet department first (3 clicks)
Find the location for information on postdoctoral alumni.	Meet the Department > Alumni > Prize Postdoctoral Alumni (3 clicks)	correct
Find the bluebook article on the CalTech Submillimeter Observatory.	Observatories (1 click)	clicked local resources first (2 clicks)
Find the list of teachers at CalTech's Astronomy Department.	Meet the Department > Faculty (2 clicks)	correct
Find the link for the Pulsar Group.	Research Activities > The Pulsar Group (2 clicks)	correct
Find the area for Weekly Talks.	Events > Talks this Week (2 clicks)	correct
Find the link to reserve the Department Car.	Local Resources > Department Car > Reservation Schedule (3 clicks)	correct
Find the Search Page.	Search (1 click)	correct

user two: second male

task	expected action	observed action
Find the page that links to Keck Observatory.	Observatories > Keck (1 – 2 clicks)	correct
Find the hours in which you could visit the Astronomy Department.	Academics > Visitors (2 clicks)	correct
Find the area where you can view pictures of the main hall.	Local Resources > Pictures of Robinson Hall (2 clicks)	correct
Find the location for information on postdoctoral alumni.	Meet the Department > Alumni > Prize Postdoctoral Alumni (3 clicks)	correct
Find the bluebook article on the CalTech Submillimeter Observatory.	Observatories (1 click)	correct
Find the list of teachers at CalTech's Astronomy Department.	Meet the Department > Faculty (2 clicks)	correct
Find the link for the Pulsar Group.	Research Activities > The Pulsar Group (2 clicks)	correct
Find the area for Weekly Talks.	Events > Talks this Week (2 clicks)	correct
Find the link to reserve the Department Car.	Local Resources > Department Car > Reservation Schedule (3 clicks)	correct
Find the Search Page.	Search (1 click)	correct

user live task data

user three: first female

task	expected action	observed action
Find the page that links to Keck Observatory.	Observatories > Keck (1 – 2 clicks)	correct
Find the hours in which you could visit the Astronomy Department.	Academics > Visitors (2 clicks)	correct
Find the area where you can view pictures of the main hall.	Local Resources > Pictures of Robinson Hall (2 clicks)	correct
Find the location for information on postdoctoral alumni.	Meet the Department > Alumni > Prize Postdoctoral Alumni (3 clicks)	correct
Find the bluebook article on the CalTech Submillimeter Observatory.	Observatories (1 click)	correct
Find the list of teachers at CalTech's Astronomy Department.	Meet the Department > Faculty (2 clicks)	correct
Find the link for the Pulsar Group.	Research Activities > The Pulsar Group (2 clicks)	clicked local resources first (3 clicks)
Find the area for Weekly Talks.	Events > Talks this Week (2 clicks)	correct
Find the link to reserve the Department Car.	Local Resources > Department Car > Reservation Schedule (3 clicks)	correct
Find the Search Page.	Search (1 click)	correct

user four: second female

task	expected action	observed action
Find the page that links to Keck Observatory.	Observatories > Keck (1 – 2 clicks)	correct
Find the hours in which you could visit the Astronomy Department.	Academics > Visitors (2 clicks)	correct
Find the area where you can view pictures of the main hall.	Local Resources > Pictures of Robinson Hall (2 clicks)	correct
Find the location for information on postdoctoral alumni.	Meet the Department > Alumni > Prize Postdoctoral Alumni (3 clicks)	clicked academics first (4 clicks)
Find the bluebook article on the CalTech Submillimeter Observatory.	Observatories (1 click)	correct
Find the list of teachers at CalTech's Astronomy Department.	Meet the Department > Faculty (2 clicks)	correct
Find the link for the Pulsar Group.	Research Activities > The Pulsar Group (2 clicks)	clicked meet the department (3 clicks)
Find the area for Weekly Talks.	Events > Talks this Week (2 clicks)	clicked research active first the events (3 clicks)
Find the link to reserve the Department Car.	Local Resources > Department Car > Reservation Schedule (3 clicks)	correct
Find the Search Page.	Search (1 click)	correct

user live task data

user five: third female

task	expected action	observed action
Find the page that links to Keck Observatory.	Observatories > Keck (1 – 2 clicks)	correct
Find the hours in which you could visit the Astronomy Department.	Academics > Visitors (2 clicks)	clicked local resources first (3 clicks)
Find the area where you can view pictures of the main hall.	Local Resources > Pictures of Robinson Hall (2 clicks)	correct
Find the location for information on postdoctoral alumni.	Meet the Department > Alumni > Prize Postdoctoral Alumni (3 clicks)	clicked academics first (4 clicks)
Find the bluebook article on the CalTech Submillimeter Observatory.	Observatories (1 click)	correct
Find the list of teachers at CalTech's Astronomy Department.	Meet the Department > Faculty (2 clicks)	clicked academics first (3 clicks)
Find the link for the Pulsar Group.	Research Activities > The Pulsar Group (2 clicks)	correct
Find the area for Weekly Talks.	Events > Talks this Week (2 clicks)	correct
Find the link to reserve the Department Car.	Local Resources > Department Car > Reservation Schedule (3 clicks)	clicked meet the department first (5 clicks)
Find the Search Page.	Search (1 click)	correct

user link modifications

As an extra form of feedback I asked the users who did the card sorting test if there were any modifications they would make to the existing site. The question proposed to the users was: Are there any links you would change the names of or combine into less links? All five users decided to provide the extra input. Here are their suggestions.

user one: first male

"Research activities, events, local resources, and public outreach all have very similar links. Local resources could fit under meet the department or academics."

user two: second male

"Wow, there are so many links. I am sure it can be simplified. Could all the Robinson's be grouped into one? Could the events be organized better, maybe in a calendar format? Local resources is similar to public outreach. You could combine faculty and staff into a category with that title. All of the links are very technical, is there a common threat that connects a couple together more than others that it could be grouped under? What is a department car?"

user three: third male

"Academics and meet the department are very similar. Can't really tell what goes under research activities."

user four: fourth male

"Combine meet the department and academics categories. Combine or remove some of the redundant links. Make observatories more obvious."

user five: first female

"Local resources and public outreach could be combined. Academics is out of order. It should be meet the department or academics first. What's the hierarchy? Should all links that go to outside sites be grouped together?"

* * * * *

introduction

problem statement

The second phase of the project was to re-design the existing web-site. Through thumbnails, concepts and computerized layouts, a new and user friendly website was to be developed and written in xHTML and CSS. Observing the existing sites and those similar to it, a feasible and pleasing design could be developed and executed. This was achieved through the gathering of inspirational and usable images as well as a color palette that fit the intended mood and aesthetics of the final design.

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existing website

The current CALTECH Astronomy department website is an average design, very similar to many other astronomy web pages. It is full of spacing issues and redundant links. While there is an overall cohesion to the design, there is not enough flexibility for large amounts of information.

The dimensions of the site change from the home page and the global pages. The navigation system on the right side changes spacing between different pages, and some have extra links that do not fit within the overall design.

http://www.astro.caltech.edu

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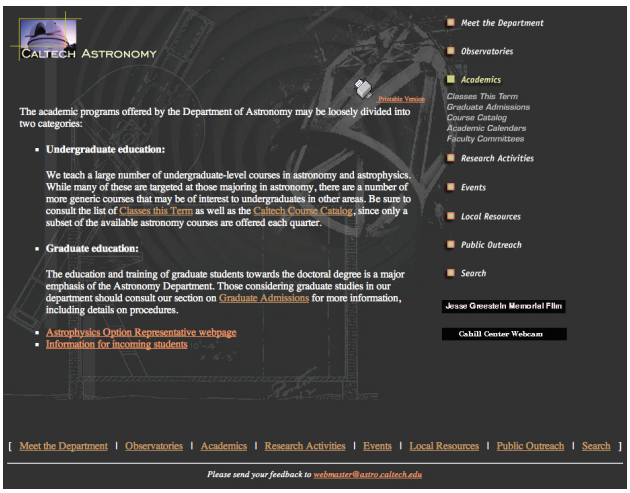

similar websites

Many other astronomy websites for schools are very similar in design and concept. Two of the similar sites were Arkansas Tech University (http://cosmos.atu.edu) and Columbia University (http://astro.columbia.edu).

The first site, Arkansas, is very similar to the CALTECH site in that it was one grouped navigation area and the information is displayed in the center area.

The Columbia website has a different approach, navigation on either side with the information in the center and across the bottom.

Both sites are functional but appear cluttered and not very creative. Their purpose is solely information based and not concerned with design aesthetics or ease of navigation.

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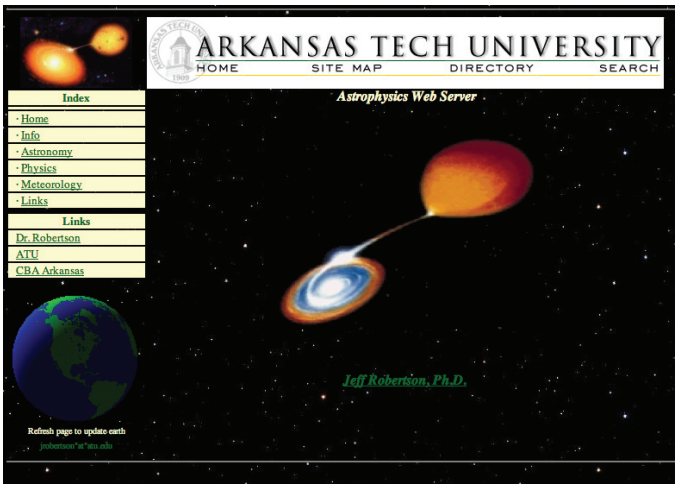

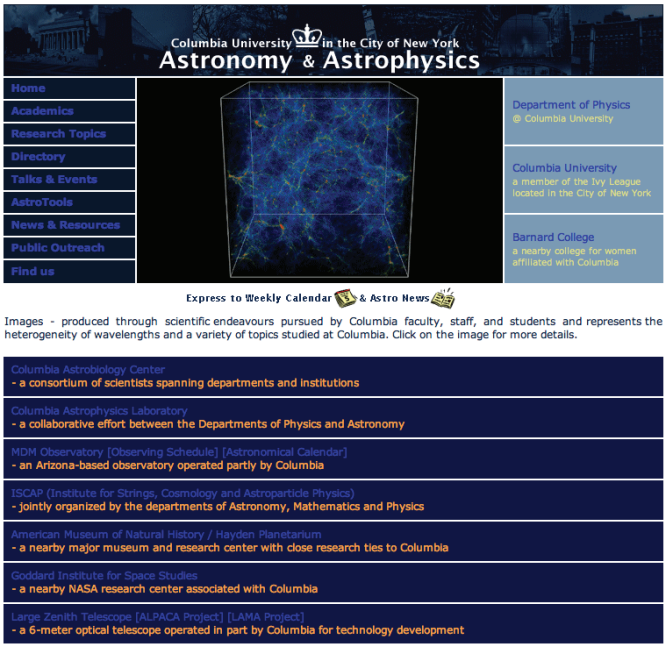

research

visual research

The images I gathered are focused on ways of seeing into space and the images that result from those readings and photographs. The images also influenced the color palette, in which I sampled the blues and reds found within the images. I wanted to focus on the star formations and constellations, as well as the tools used to view them and predict their positions in the night sky. These images include a gravitational model, the constellation of pleiades, a radio telescope, a distant pair of galaxies colliding, a spharea (ancient tool for determining the position of the constellations) and a field of stars.

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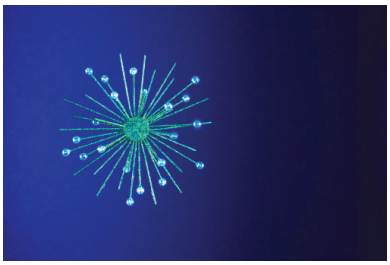

concepts

thumbnails

Eight initial concepts were developed as a starting point for the re-design of the existing website. They were influenced by the research images and the underlying themes of each and similar images. Each concept takes a different view of astronomy and shows a relationship between the macro and micro aspects of each idea.

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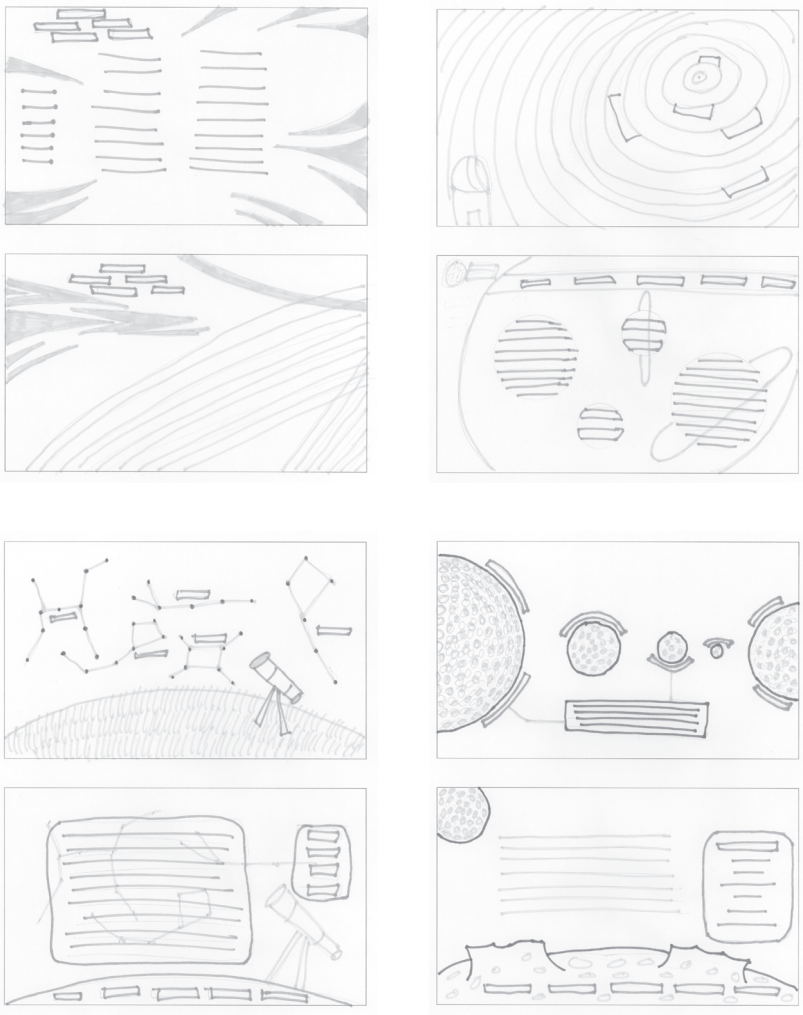

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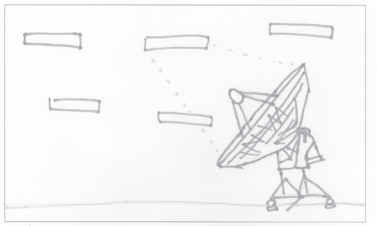
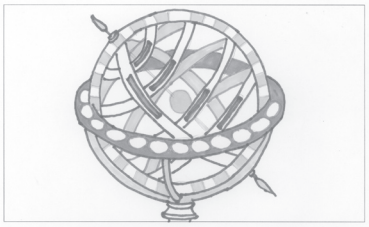
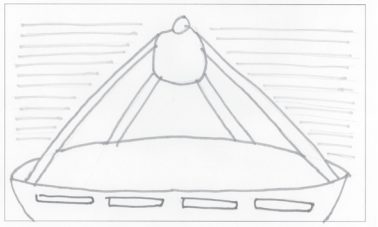
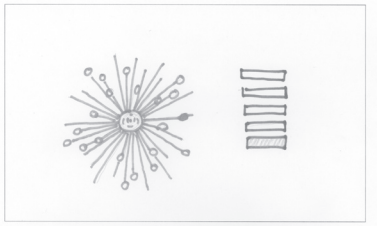
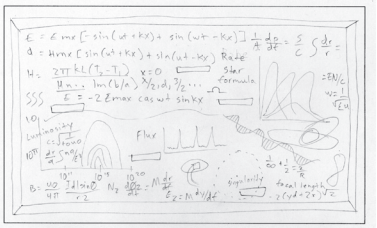
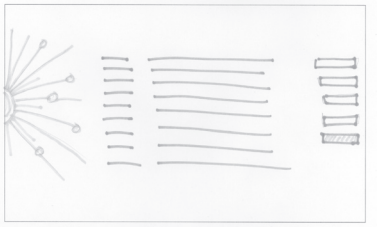


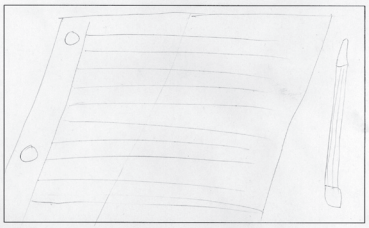










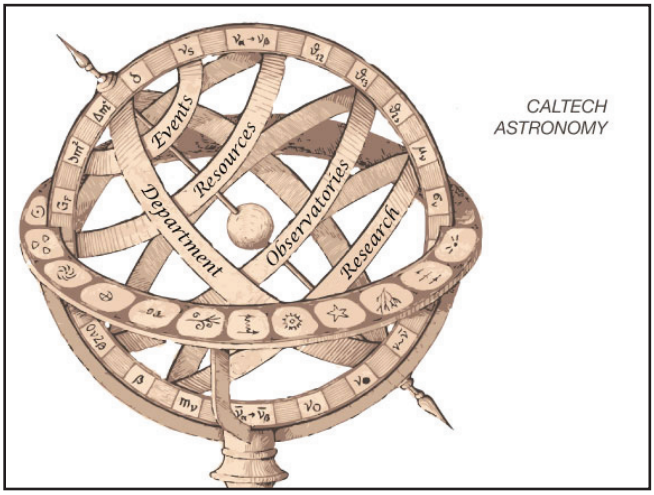


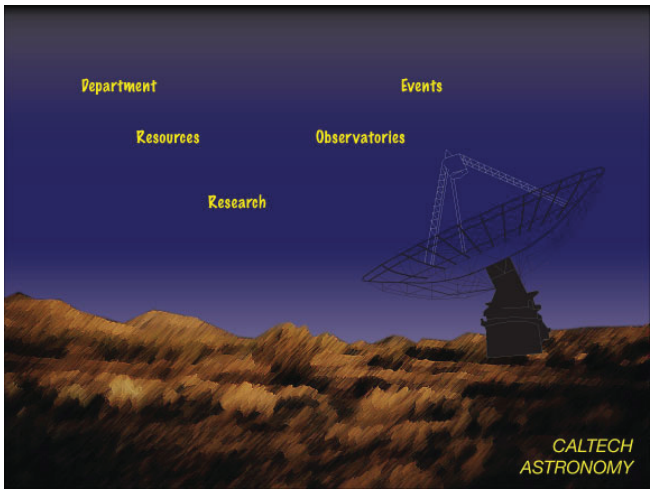
concepts

prototypes

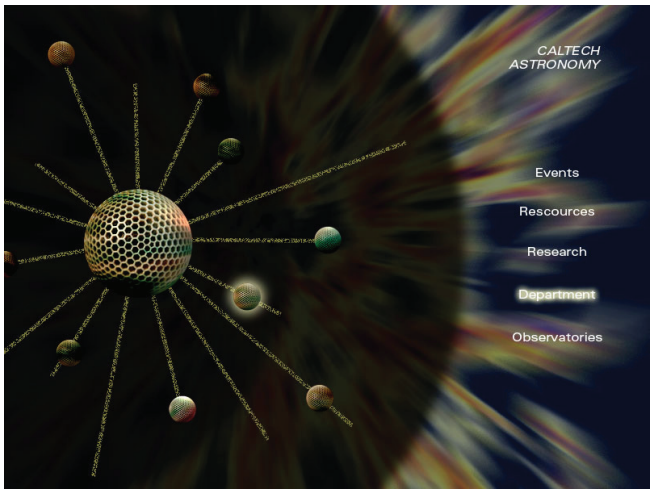
The initial concept thumbnails were taken into consideration, combined and edited to result in the computerized prototypes for the re-design. These are the initial home pages that were created as a preview of what the re-design would look like.

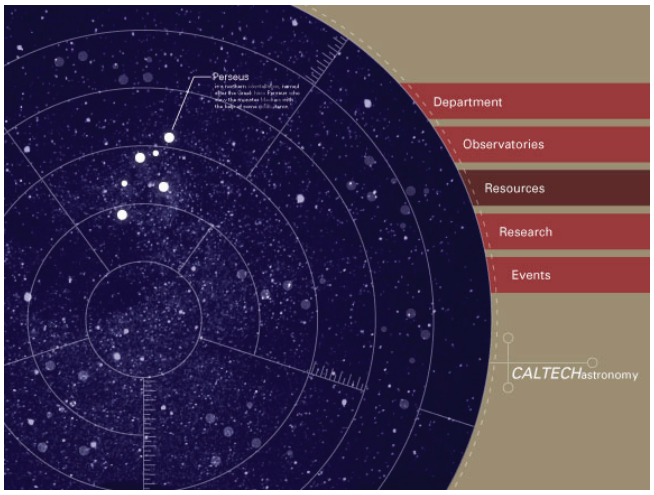
* * * * *





prototypes continued



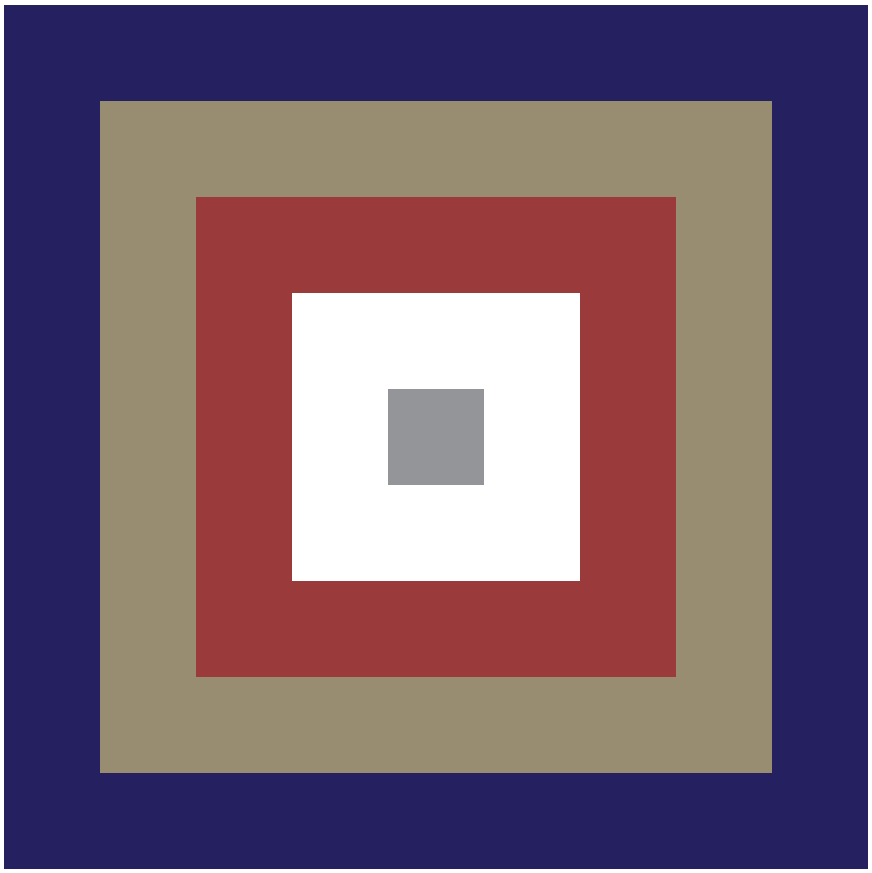


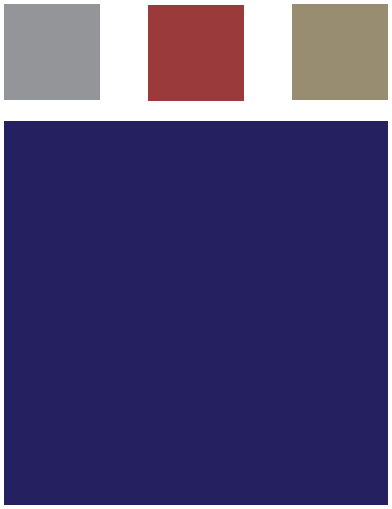
color palette

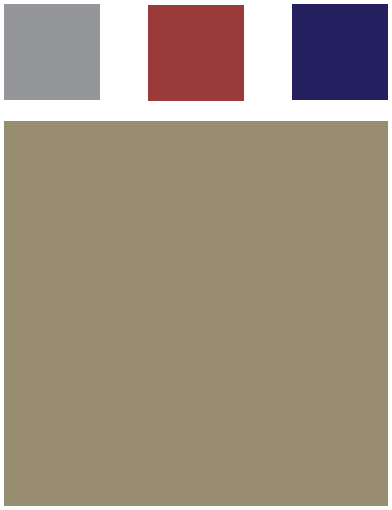
color ratios

The following are the color palettes for the home and global pages. To the right is an overall view of the ratios of color, the outside is used most while the inside is used the least. Below shows the palettes for the home page and the global pages, respectively.

* * * * *







The blue color represents space and the sky. Black is too dark so blue was chosen to support the feeling of cold and emptiness and also add life to the design. The supporting colors are the tan and red. They are both muted colors that complement the blue while keeping a sophisticated feel.

typography

Univers

I choose to use the font Univrs because of its readability while staying modern and having many different faces to choose from within the family. I primarily used the regular, light, extended and bold faces.

* * * * *

Univers Roman
ABCDEFGHIJKLMNOPQRSTUVWXYZ
abcdefghijklmnopqrstuvwxyz

Univers Light
ABCDEFGHIJKLMNOPQRSTUVWXYZ
abcdefghijklmnopqrstuvwxyz

Univers Extended
ABCDEFGHIJKLMNOPQRSTUVWXYZ
abcdefghijklmnopqrstuvwxyz

Univers Bold
ABCDEFGHIJKLMNOPQRSTUVWXYZ
abcdefghijklmnopqrstuvwxyz

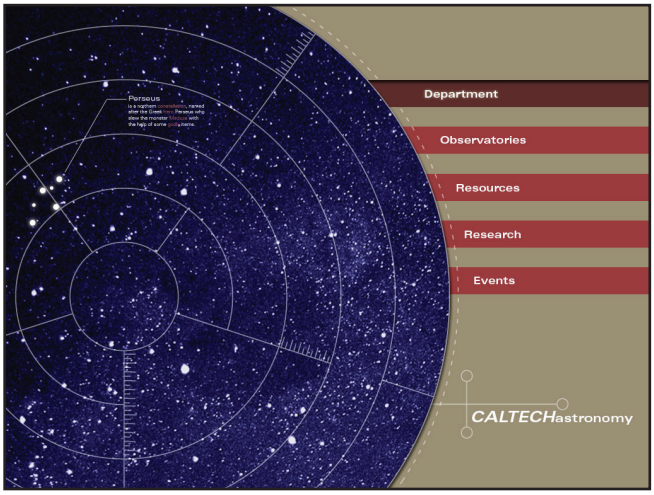
final

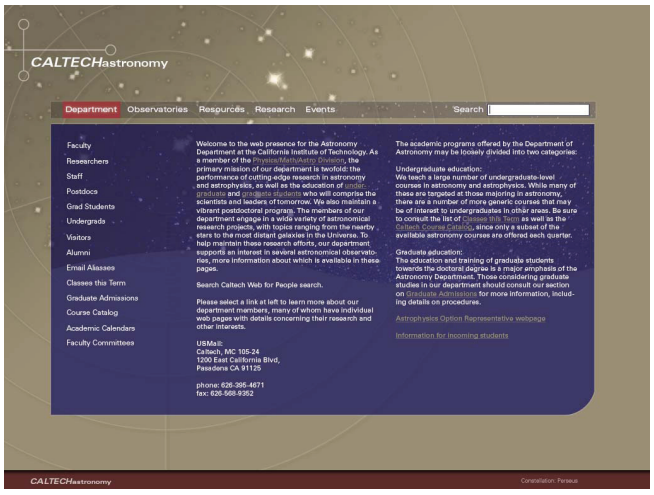
final layout

The final design is a culmination of all of the initial concepts and prototypes.

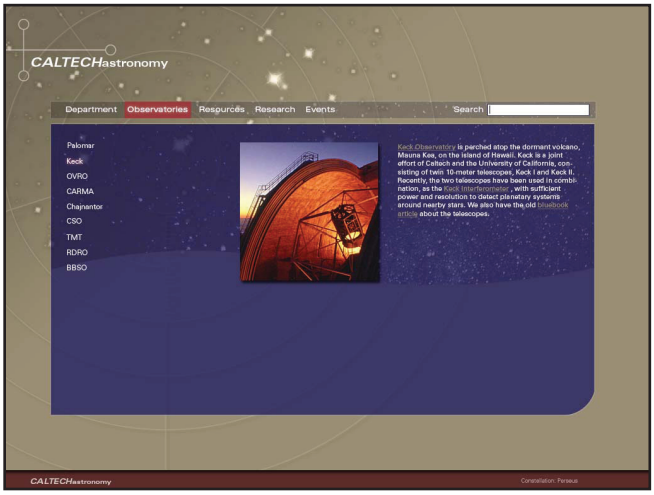
The global pages are a derivative of the home page. It uses the same dimensions and organizes the information in three distinct areas. There is the main navigation bar that displays the original home page links. Most global pages have a sub navigation area on the left side of the page with its corresponding information displayed to the right in a two column layout.

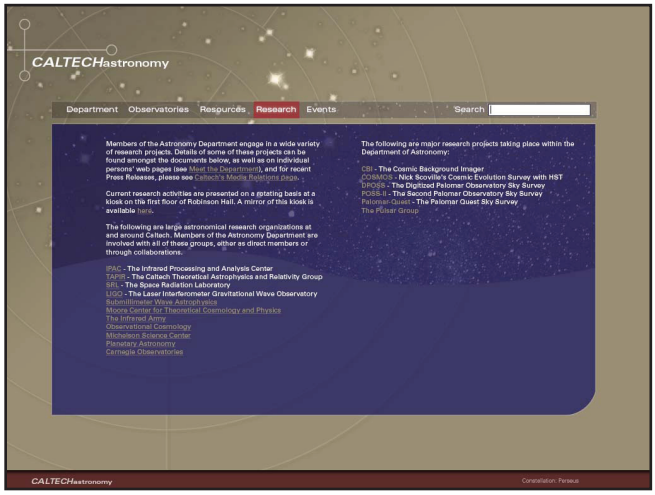
* * * * *

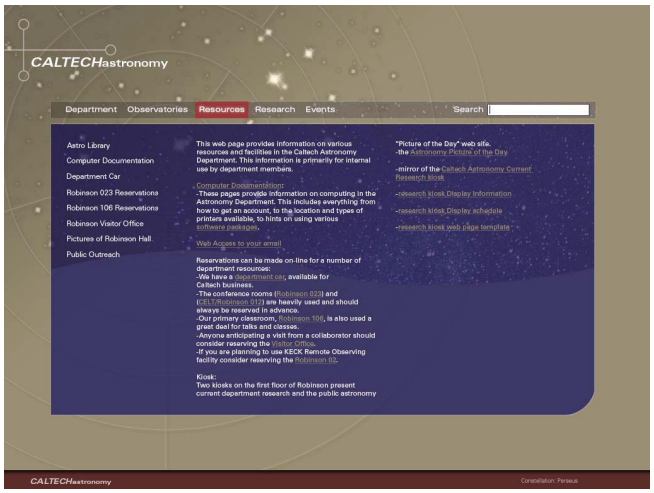


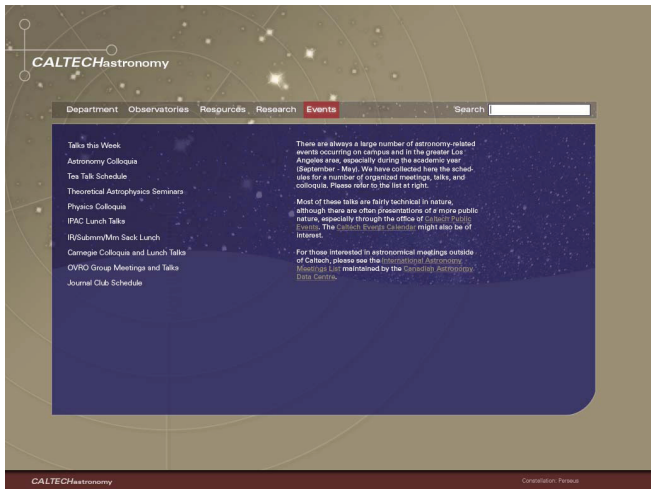


final


CALTECHastronomy
Department Observatories Resources Research Events Search
Palomar
Keck
OVRO
CARMA
Chajnantor
CSO
TMT
RDRO
BBSO
Keck Observatory is perched atop the dormant volcano, Mauna Kea, on the island of Hawaii. Keck is a joint effort of Caltech and the University of California, consisting of twin 10-meter telescopes, Keck I and Keck II. Recently, the two telescopes have been used in combination, as the Keck Interferometer , with sufficient power and resolution to detect planetary systems around nearby stars. We also have the old timetyork article about the telescopes.
CALTECHastronomy
Constellation: Perseus


CALTECHastronomy
Department Observatories Resources Research Events Search
Members of the Astronomy Department engage in a wide variety of research projects. Details of some of these projects can be found amongst the documents below, as well as on individual persons' web pages (see Meet the Department), and for recent Press Releases, please see Caltech's Media Relations Page.
Current research activities are presented on a rotating basis at a kiosk on the first floor of Robinson Hall. A mirror of this kiosk is available here.
The following are large astronomical research organizations at and around Caltech. Members of the Astronomy Department are involved with all of these groups, either as direct members or through collaborations:
IPAC - The Infrared Processing and Analysis Center
TAPIR - The Caltech Theoretical Astrophysics and Relativity Group
SRL - The Space Radiation Laboratory
LIGO - The Laser Interferometer Gravitational Wave Observatory
Submillimeter Wave Astrophysics
Moore Center for Theoretical Cosmology and Physics
The Infrared Army
Observational Cosmology
Michelson Science Center
Planetary Astronomy
Carnegie Observatories
The following are major research projects taking place within the Department of Astronomy:
CBI - The Cosmic Background Imager
COSMOS - Nick Scoville's Cosmic Evolution Survey with HST
DPOSS - The Digitized Palomar Observatory Sky Survey
POSS-II - The Second Palomar Observatory Sky Survey
Palomar-Quest - The Palomar Quest Sky Survey
The Pulsar Group
CALTECHastronomy
Constellation: Perseus


CALTECHastronomy
Department Observatories Resources Research Events Search
Astro Library
Computer Documentation
Department Car
Robinson 023 Reservations
Robinson 106 Reservations
Robinson Visitor Office
Pictures of Robinson Hall
Public Outreach
This web page provides information on various resources and facilities in the Caltech Astronomy Department. This information is primarily for internal use by department members.
Computer Documentation:
-These pages provide information on computing in the Astronomy Department. This includes everything from how to get an account, to the location and types of printers available, to hints on using various software packages.
Web Access to your email
Reservations can be made on-line for a number of department resources:
-We have a department car, available for Caltech business.
-The conference rooms (Robinson 823) and (CALTECHrobinson 013) are heavily used and should always be reserved in advance.
-Our primary classroom, Robinson 106, is also used a great deal for talks and classes.
-Anyone anticipating a visit from a collaborator should consider reserving the Visitor Office.
-If you are planning to use KECK Remote Observing facility consider reserving the Robinson 65.
Kiosk:
Two kiosks on the first floor of Robinson present current department research and the public astronomy
"Picture of the Day" web site.
-the Astronomy Picture of the Day
-mirror of the Caltech Astronomy Current Research kiosk
-research kiosk Display Information
-research kiosk Display schedule
-research kiosk web page template
CALTECHastronomy
Constellation: Perseus


CALTECHastronomy
Department Observatories Resources Research Events Search
Talks this Week
Astronomy Colloquia
Tea Talk Schedule
Theoretical Astrophysics Seminars
Physics Colloquia
IPAC Lunch Talks
IR/Submm/Mm Sack Lunch
Carnegie Colloquia and Lunch Talks
OVRO Group Meetings and Talks
Journal Club Schedule
There are always a large number of astronomy-related events occurring on campus and in the greater Los Angeles area, especially during the academic year (September - May). We have collected here the schedules for a number of organized meetings, talks, and colloquia. Please refer to the list at right.
Most of these talks are fairly technical in nature, although there are often presentations of a more public nature, especially through the office of Caltech Public Events. The Caltech Events Calendar might also be of interest.
For those interested in astronomical meetings outside of Caltech, please see the International Astronomy Meetings List maintained by the Canadian Astronomy Data Centre.
CALTECHastronomy
Constellation: Perseus