Library:

Newsletters and Periodicals:
  Announcements, Business Briefs, The Interaction Point*, New Options for Wellness, Training Opportunities*.

USENET News:
  slac.announce.important, More USENET News.

• SLAC Divisions, Groups, & Programs+

  Director's Office & Divisions:
  Director's Office, Business Services, Environment, Safety, & Health, PEP-II Asymmetric B Factory, Stanford Synchrotron Radiation Laboratory.

  Groups, Departments, Etc.:

  Programs:
  Education, Summer Institute, SLUO.

  Organization Charts:

• Useful Information Elsewhere

  Physics:
  HEP Experiments:
    ALEPH, DELPHI, L3, OPAL; CLEO II; H1, ZEUS; CDF, DØ; More Experiments Online.
  HEP Institutions:
    Brown (including The Virtual Review), CERN, Cornell, DESY, Fermilab, IHEP/China, LANL (including E-Prints), LBL (including PDG), LLNL, More HEP Institutions.

  Professional Societies and Associations:
  Scientific:
    AAS, AIP, APS (including PACS and What's New), NAS and More.
  Computing:
    ACM, BayCHI, BayLISA, HEPiX, UniForum, USENIX & SAGE.

  Federal Resources:
  DOE, FedWorld, the MetaCenter, NASA, NERSC, NSF, USGS, More Federal Agencies.

  Local Area Resources:
  Stanford University and its Libraries and Medical Center, More Local Area Resources.

  Network Resources:
    BBN Planet, Computer-Mediated Communication, CREN/BITNET, ESnet (including X.500 White Pages), HEPIC, JANET, References.

  Other Information Sources:
    Colleges and Universities, GopherSpace, Grab Bag, Hacker's Jargor, LISTSERV Lists, USENET FAQs, the WWW Virtual Library (including Accelerator Physics).

* Access to this link is restricted to SLAC users.
This page is primarily for SLAC researchers, collaborators, and staff. A longer version is available by selecting the "Detailed Home" button in the menu bar above. For help, see the 'SLAC Introduction to WWW.' For a more general introduction to the Lab, select the "SLAC Welcome" button.

**SLAC Announcements**

- 6 Feb 97 Alternatives to VM Publishing
- 3 Feb 97 End of General Service for VM on March 1
- 30 Jan 97 VM Phaseout Fair, Tuesday, Feb. 11, in the Auditorium
- 28 Jan 97 Comments Requested on Proposal for ISDN Service
- 21 Jan 97 Solicitation of Proposals by the FY 97 DOE Small Business Innovation Research (SBIR) Program

**SLAC Research**

High-energy, particle, and synchrotron radiation physics; accelerator physics; accelerator operations; and theoretical physics; e.g., BABAR, SLD, SSRL, PEP-II, and Theoretical Physics.

**Information from SLAC (including SPIRES Databases)**

Information for users worldwide, such as jobs, directories, databases, calendars, publications, and software, e.g., SPIRES-HEP, Today's E-Print, and FreeHEP.

**SLAC Computing and Communications**

Computing resources, services, and plans; networking; and telecommunications; e.g., Platforms, Computer Networking, and Emergency Communications.

**SLAC Institutional Information**

Site information; internal publications and communications; administrative tools; and library; e.g., Seminars, ELDREQ*, and Books.

**SLAC Divisions, Groups, & Programs**

Main organizational units, offices, and outreach efforts, e.g., Environment, Safety, & Health; Technical Publications; and Education.

**Useful Information Elsewhere**

HEP experiments and institutions; professional societies; DOE and other federal, state, local, and networked resources; e.g., Experiments Online, APS What's New, and DOE.
Particle Physics Experiments

- **BABAR**
- **BEijing Spectrometer (BES)**
- E143
- E144
- E154
- E155
- Millicharged Particle Search (mQ)
- SLD Experiment at the SLC (SLAC Linear Collider)

Particle Astrophysics Experiments

- **Group K**

Synchrotron Radiation

- **Stanford Synchrotron Radiation Laboratory (SSRL)**

Accelerator Research & Development

- **Next Linear Collider (NLC)**
- **Next Linear Collider Test Accelerator (NLCTA)**
- **PEP-II Asymmetric B Factory**
- **Polarized Photocathode Research Collaboration (PPRC)**
- **Stanford Synchrotron Radiation Laboratory (SSRL)**
- **More Accelerator Research**

Accelerator Operations

- Linac Logs:
  - Yesterday*
  - Today*
  - This Week*
  - This Year*
- SPEAR:
  - Status
Welcome to SLAC

The Stanford Linear Accelerator Center (SLAC) is a national basic research laboratory, probing the structure of matter at the atomic scale with x rays and at much smaller scales with electron and positron beams. The laboratory is operated by Stanford University under a contract from the United States Department of Energy (DOE).

The combined staff is currently about 1300, 150 of whom are Ph.D. physicists. Typically 800 physicists from universities and laboratories around the world participate in the high energy physics program and 800 scientists from universities and industrial laboratories are active in the synchrotron radiation program.

Points of Interest

- What We Do
  - About SLAC's Research Program:
  - About SLAC's Experimental Facilities:
  - A Bit of SLAC History

- Learn About Science at SLAC
Two Approaches to Designing Web Information Architectures

SHARE 1997 Winter Technical Conference
Session 7413
3 Mar 1997, 1:30 p.m.

Sandy S. Moy
University of Washington

Joan M. Winters
Stanford Linear Accelerator Center

Topics

• Getting started.
  – Initial assumptions.
  – Snapshot history of the Web.
• Organizational structures and guidelines.
  – Development and support.
• Page layout and structural components.
• Problems--resolved or pending.

From our individual perspectives...
An almost live view from Seattle on Thursday, February 27, 1997 at 11:57. The temperature is 7°C (44°F, 280K). Winds are at 8 knots (9 mph) from the NNW, creating a wind chill factor of 1°C (35°F, 275K). Gusts to 11 knots (13 mph). Barometric pressure is 1008 mbar (29.77 in). The sun rose today at 06:53 and will set at 17:52. The moon is waning gibbous (83% of full).
UW Approach To Designing Web Information Architectures

Computing & Communications (C&C)

- Campus network
- Central computers: academic, administrative, hospital
- UWTVD and video
- Telecommunications

C&C Web Servers

- Weber:
  - Faculty/staff/student individual pages
  - Departmental pages
  - Class (instructional) pages
- WWW:
  - Central UW institutional information
  - Task oriented, not based on the UW organizational structure

University of Washington January 1997 Statistics

65,000 Computer Accounts on central computers
500,000 Email messages a day through central computers
30,000 Computers connected to campus backbone
300,000,000,000 Bytes/day on campus backbone

Weber: 563,000 Files
       600,000 Hits per day

WWW:    74,000 Files
         5,000,000 Hits per month

In The Beginning...

There was a UW home page
...and it was good,
...but not "official"!

Then a few more UW home pages appeared
...they were good too,
...but also "unofficial"!

C&C was asked to build the "official" UW home page
...and so it came to pass,
...eventually.
First Steps

- Established a "Hometeam" of five people
- Enlisted behind the scenes software engineering
- Began designing, with lots of kibitzing from upper management
- Created a page with unique look (cambot & stoned)
- Started with 5 categories: The UW, Tools, UW Links, Beyond UW, UW Home
- Put into production Dec 23, 1994, (one year from start date)

Recognized that this was just the beginning...

Built on Existing Processes

Used text-based CWIS (UWIN) as a model
- Working with campus units
- Building up-to-date, quickly changeable, accessible info
- Relieving units from having to answer so many questions
- Providing information any time, any where

Recognized advantages of Web-based CWIS
- Offering a quick reference PLUS details
- Using a client "everyone" knows

Built the "Web Guides" team

Grew to include people from the Library, UW Administration, Health Sciences, Student Affairs, University Relations, and more C&C folks

Made Some Assumptions
- Start simply -- one or two projects
- Find departments with good, enthusiastic people who know the material
- Ensure departmental management support
- Assign a Web Guide to the project
- Build a coherent collection of information
- Make it clear it is official information
- Enforce some basic guidelines

Built the Guidelines
- Coherent collection of info -- pages look alike -- like a book
- Central institutional information recognizable as official
- Design that meet ADA standards
- Good PR for UW
- Only one really firm rule: you cannot blink!
- Graphics only when meaningful
- Jargon-less
- Condition html for the "last modified date"
- Task oriented
- Few structural guidelines
- Fast, backed up, always available
- Web developer/maintainer someone who knows what is going on in the unit
Page Organization

- Organization is important and impossible
- Information in only one place
- If already out there, link to it
- Use place-holders when info is not ready.
- Get permission to put one section online
- Put up one page with the contents that are needed (eg, EO statement)

Home Page Examples
- Current home page
- Student Guide
- Admin. Guide
- Travel (our first project)
- Air Travel
- Meal Expenses

Challenges (some of them insurmountable :)
- Teaching a task oriented approach
- Building confidence and interest of unit management
- Working with those who have been "volunteered"
- Being recognized everywhere as the "official" UW team
- Working with existing pages
- Building a good search engine
- Finding more tools for the developers
- Dealing with paper documents shadowing the Web pages
- Meeting quality and consistency goals
- Taking time to build clearly written, imaginative pages

Future
- New design of the home page
- Revisit the look-and-feel of area pages
- Access to databases
- Secure server
- More and more information online
- Individual departmental Intranets
Joan M. Winters's Handout

Getting Started
Stanford Linear Accelerator Center

- National basic research laboratory founded in 1962.
  - Uses electron & positron beams at sub-nuclear scale.
  - Uses synchrotron radiation at atomic scale.
- 2-mile long linear accelerator, SPEAR & PEP rings, and SLC collider reaching 100 GeV.
- Staff of about 1300.
- About 1600 collaborating scientists from universities and laboratories worldwide.
- Building Asymmetric B Factory now.
- Operated by Stanford University under contract with the Department of Energy.

Role of the SLAC Web

- Initially for working members of the SLAC globally distributed community.
  - To get High Energy Physics Preprints.
- Produced by volunteers.
- Very visible to diverse audiences.
- Subsequently of interest to those concerned with SLAC’s public image.
- Subject to pressures from many directions.
- A complex place with deceptively simple center.
History of the Web and SLAC

- WWW demo'd at CERN, Christmas 90.
- First US server put up at SLAC, Dec 91.
- WWWizards created, Jan 92.
- MidasWWW GUI browser implemented, Nov 92.
- First experimental version of SLAC Home Page installed, Jul 92.
- First official version of SLAC Home Page installed, Nov 93.

More SLAC Page History

- SLAC three-page "core" model installed, Dec 95.
  - SLAC Home Page split into Highlighted & Detailed formats.
    - Review of sites, human factors research.
    - User input including prototype & survey.
    - Major categories and format of Highlighted SLAC Home Page of particular concern.
  - New Welcome Page became main SLAC server default.
- WWW Support Page redesigned into matrix, installed, Sep 96.
Major Central SLAC Web Installations

<table>
<thead>
<tr>
<th></th>
<th>SLAC Home Page</th>
<th>Pages on VM</th>
<th>Pages on UNIX</th>
</tr>
</thead>
<tbody>
<tr>
<td>[Mar 92]</td>
<td>DEFAULT HTML, DEFAULTX HTML</td>
<td>8</td>
<td>none</td>
</tr>
<tr>
<td>Nov 93</td>
<td>SLAC HTML</td>
<td>28</td>
<td>4</td>
</tr>
<tr>
<td>Dec 95</td>
<td>highlighted.html, detailed.html</td>
<td>8*</td>
<td>-64</td>
</tr>
<tr>
<td>Sep 96</td>
<td>highlighted.html, detailed.html</td>
<td>1</td>
<td>~33</td>
</tr>
</tbody>
</table>

* * are pointers to the "content" pages moved to UNIX.

Organizational Structures and Guidelines.
SLAC WWW Organizational Structures 
Development and Support

- Transition to formal structures 1994-1996.
- Formal structures in place late 1996.
  - Starting to find their roles.
  - Volunteers still play a part.

A New SLAC Direction

Handled properly, WWW can partially fill the role of providing a platform-independent way for us to help one another, as we did when we all resided on VM and shared CMS help files and REXX execs. If we make full use of this opportunity, we can go a long way to restoring the sense of community we enjoyed in the 80's.

Final Report of the VM Phaseout Committee, Oct 94
Evolution of WWW Support Groups

<table>
<thead>
<tr>
<th>Group</th>
<th>Dates</th>
<th>Head</th>
</tr>
</thead>
<tbody>
<tr>
<td>WWW Wizards Working Group</td>
<td>1/92-Summer 93</td>
<td>Louise Addis</td>
</tr>
<tr>
<td></td>
<td>Summer 93-10/94</td>
<td>Tony Johnson</td>
</tr>
<tr>
<td></td>
<td>10/94-Present</td>
<td>Tony Johnson</td>
</tr>
<tr>
<td></td>
<td>12/94-6/95</td>
<td>Laurie Gennari &amp; Debo White</td>
</tr>
<tr>
<td></td>
<td>2/95-12/95</td>
<td>P.A. Moore</td>
</tr>
<tr>
<td></td>
<td>10/95-Present</td>
<td>Pat Kreitz</td>
</tr>
<tr>
<td></td>
<td>10/95-Present</td>
<td>Kathryn Hennins</td>
</tr>
<tr>
<td></td>
<td>11/96-Present</td>
<td>Sharon Minton</td>
</tr>
<tr>
<td>WWW Style</td>
<td>Proposed 1/97</td>
<td>Tom Mattison</td>
</tr>
<tr>
<td>WSCs</td>
<td>12/95-Present</td>
<td>Edgar Whipple</td>
</tr>
<tr>
<td>Ad Hoc to Revise SLAC Home Pages</td>
<td></td>
<td></td>
</tr>
<tr>
<td>SCS ID-WWW</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

All now under the ADCC.

WWW Coordinating Committee

- Established to:
  - Support appropriate development & creative uses of the Web at SLAC.
  - Develop and recommend policy & standards.
- Has one representative per division or major constituency who:
  - Communicates policies & standards to group.
  - Establishes local policies & oversees group pages.
  - Works with local Web Support Coordinators.
- Reports to the Associate Directors’ Committee on Computing.
More on WWW Organizations

- **WWWCC**’s Subcommittees are:
  - **Welcome/Institutional Page Committee** for public information development.
  - **Ad hoc Committee** on SLAC Home Page revisions.
  - **Web Support Coordinators** for communication, coordination, & training.
  - **WWW Technical Committee** for technical directions & development.

- **Information Desktop-WWW Project** for infrastructure development & support.
  - SLAC Home Page owner.

Documents on Web Support

- Initially written for authors:
  - Change management templates (Apr 93).
  - Recommended page elements (Oct 93).
  - Privacy and confidentiality memo (Nov 94).
  - URL and file naming scheme (Jan 95).
  - How to install pages (May 95).
  - Safe **cgi** script writing, including wrapper & public scripts (Jul 95).
  - Usage stats...

- Now added:
  - Policies for users, authors, & WSCs.
  - More tutorial info for users & authors...
Page Layout and Structural Components

Design Goals...

- To make a WWW workplace that is:
  - Powerful, robust, and comfortable
  - Centered around the SLAC Home Page
  - For the diverse members of the SLAC working community
  - Anyplace in the world.
...Design Goals

- To provide ready access to a separate, polished space about SLAC containing:
  - Introductory information about the institution.
  - Research & educational information for the public.
- To create a common information space that is:
  - Traversable by different users.
  - Accessible to authors.
  - Maintainable by space owners.

Audiences...

Users of the SLAC Home Page may be:
- Members of the SLAC working community
  - Experimental physicists (local and remote), accelerator physicists, engineers, programmers, administrators, support service providers, teachers, students, vendors, DOE, database searchers, ...
- Creators of the SLAC Web
  - Information providers, system administrators, ...
- Visitors
  - From Welcome Page, from links into other parts of the SLAC Web...
...Audiences

- Different knowledge and purposes.
- Different cognitive styles
  - Some prefer a hierarchy of information with limited information per page.
  - Some prefer as much information as possible in one flat space.
- Different cognitive states
  - Learner.
  - Problem solver.
  - Refresher.
- Different environments
  - Platforms.
  - Browsers.
  - Network bandwidth.

Three Cognitive States

Identified by research in cognitive psychology.

- **Learner** has to learn at least some new concept, relationship, and/or nomenclature in order to work through a situation.
- **Problem solver** knows all the critical concepts, relationships, and nomenclature but does not know how they fall together to resolve the specific problem.
- **Refresher** has resolved a similar situation in the past but needs reminding of particular aspects or details.
Information Architecture

Composed of:

• Page Architecture
  – What’s on which page.
  – Structure relating the set of pages.

• File Architecture
  – The organization of the file space holding the pages.

• And more...

• “Layering” is powerful.

SLAC Three-Page “Core” Model

• Welcome Page
  – Intended for surfers, virtual tourists; learners.
  – “home” to some.

• Highlighted & Detailed SLAC Home Pages
  – Intended for diverse working members of the SLAC community; refreshers.
    • Frequent transit point.
  – Contains –same info in hierarchical & flat formats for different cognitive styles.
    • Like book’s table of contents or index.
    • Like an aerial view of San Francisco with or without fog.
Goal of Three Page “Core” Model

- At cost of complexity, SLAC Web serves multiple audiences significantly more successfully than with simpler model.
- Complexity is:
  - Carefully thought out.
  - Rigidly structured.
  - Relatively small.
- Many other sites have equivalent of SLAC Welcome and Home Pages.

Things to Note on the SLAC Home Page

- Required and recommended page elements.
  - SLAC Acknowledgement, Date.
  - <title> and titling information match.
- Area for learners.
  - Tutorial, then news subsection.
- Area for refreshers.
  - Carefully structured reference info.
  - Mostly “functional” info.
    • Separated from “organizational” info.
- More required and recommended page elements.
  - Disclaimer link & owner.
- Button Bars.
More Design Rules

- Establish context clearly; then make use of.
- Separate “index” from descriptive info.
- Structure index pages carefully and consistently for quick transit.
- Generally keep titles separate from links.
- Don’t abbreviate words in titles.
- Generally alphabetize lists of links.
- Each non-news link needs one primary place in the SLAC reference structure.
  - May also be in the standard page meta-language.
  - Use cross links parsimoniously in index info.
- Think about needs and document “slaonly” info.

Problems along the Way
Resolved or Pending
Progress Made

- Three-page "core" model successfully provides for different audiences.
- Careful and consistent design supports finding information quickly.
- Layered information provides multiple access.
  - One aspect is the power of one primary server and standard URL naming.
- Relative stability in design offers advantages in production environment.
- People in diverse audiences seem happy with current design.

Why One Size Does Not Fit All...

On the Highlighted SLAC Home Page:
...it fits on one screen. I don’t have to scroll to see all the major headings. I prefer my hierarchies hierarchical and not flattened.

Edgar Whipple, 10 Feb 97

On the Detailed SLAC Home Page:
...I find paths to the things I want very quickly, because they are all there on one page.

Lois White, 15 Jan 97
SLAC Home Page
Usage Statistics
(One Week Intervals)

<table>
<thead>
<tr>
<th></th>
<th>Apr 96</th>
<th>Jul 96</th>
<th>Aug 96</th>
<th>Nov 96</th>
<th>Feb 97</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>All domains</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Highlighted</td>
<td>54%</td>
<td>45%</td>
<td>46%</td>
<td>43%</td>
<td>41%</td>
</tr>
<tr>
<td>Detailed</td>
<td>46%</td>
<td>55%</td>
<td>54%</td>
<td>57%</td>
<td>59%</td>
</tr>
<tr>
<td><strong>slac.stanford.edu</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Highlighted</td>
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<td>36%</td>
<td>34%</td>
<td>33%</td>
<td></td>
</tr>
<tr>
<td>Detailed</td>
<td>63%</td>
<td>64%</td>
<td>66%</td>
<td>67%</td>
<td></td>
</tr>
</tbody>
</table>

SLAC Home Page
Nexus of Competition

- “First on the home page.”
  - Visible on the Highlighted SLAC Home Page.
- Workers need news.
- DOE, *et al.*, need “pretty” page.
- DOE, *et al.*, need tutorial info.
- Workers need quickly recognizable info.
  - For speedy transit.
  - To minimize reading, locate positionally.
- Creative designs search for expression.
- Conflicting usage styles all want comfort.
SLAC Home Page
Iterating the Design

- Check out SLAC’s view of itself.
  - Read documents that view the entire institution.
  - Talk with people who have wide perspective.
- Listen to various stakeholders’ needs.
- Perform empirical research into how users see the major info categories in the SLAC Web.
  - Try similarity matrix to surface major categories.
  - Try Sandia National Lab’s “card sort” approach.
- Be fair--hold the center!

SLAC Home Page
Improving the Major Categories

<table>
<thead>
<tr>
<th>Current</th>
<th>Prototype</th>
<th>Nov 93</th>
<th>Sep 93</th>
</tr>
</thead>
<tbody>
<tr>
<td>SLAC Research Information from SLAC (including SPIRES Databases)</td>
<td>SLAC Research Programs Information from SLAC (incl. SPIRES)</td>
<td>SLAC Information</td>
<td>SLAC Information</td>
</tr>
<tr>
<td>SLAC Computing and Communications SLAC Institutional Information</td>
<td>SLAC Operating Facilities SLAC Computing &amp; Communications</td>
<td>SLAC Physics Program</td>
<td>Other Information</td>
</tr>
<tr>
<td>SLAC Divisions, Groups, &amp; Programs Useful Information Elsewhere</td>
<td>Other SLAC Programs</td>
<td>Other SLAC Information Resources Other Useful Information</td>
<td>Support</td>
</tr>
<tr>
<td>SLAC Administrative Processes About SLAC SLAC Organization Useful Information Elsewhere</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Beyond the SLAC Home Page

There’s a structure of information to design.
• What belongs on the SLAC Home Page?
• How to balance the design of the overall reference structure?
  – What would fit on a secondary or tertiary page more logically?
• How best to meet refresher & learner needs?
• How best to meet public image needs?

More Issues

• Keep, or not, both the Highlighted and Detailed SLAC Home Pages; or tailor one.
• Consider Tony Johnson’s “Smart” Home Page Proposal.
  – Tailor SLAC Announcements, seminars, etc.
  – Tailor the major reference sections?
• Obtain change management tools.
• Obtain structure-visualization tools.
• Improve the organizational structures for development & support.
A Developer’s Thoughts
What’s Next?

Yes, I am convinced that a lot of work and THINKING has to be done in this field. It is nothing really new, but the web makes it so terribly obvious if you get your organisation wrong. But the problem is that one needs at least two or three versions of the top pages depending on the “audience”. A little bit like having very different kind of newspaper to transmit the news to the various kinds of readers.

Bernd Pollermann, CERN, 6 Feb 97

Conclusion

• Complex demands have resulted in a complex space.

• The SLAC Home Page is a powerful place that appears relatively simple and successfully services many, but not all.

• Creation of a powerful, robust, and comfortable Web for diverse audiences depends increasingly on the design of the entire site’s information architecture.

• Human factors research is even more important than before for the site’s successful evolution.
Acknowledgements

- Many thanks to Tony Johnson, Edgar Whipple, Ilse Vinson, Dennis Wisinski, and Diana Gregory of SLAC for contributions to this talk in various ways.
- This work was supported by the Department of Energy Contract, DE-AC03-76SF00515.

For more information, check out:
http://www.slac.stanford.edu/

The handout is at:

Selected Bibliography


Nygren, Else, 1996. "'Between the clicks': Skilled Users Scanning of Pages."*

Smilowitz, Elissa D., 1996. "Do Metaphors Make Web Browsers Easier to Use?"*


Appendix A

More on the Design of the SLAC Information Architecture

Some Details of SLAC Web History

- NeXT browser put up at SLAC by Paul Kunz & Tim Berners-Lee, Sep 91.
- First US server put up at SLAC by Terry Hung & Paul Kunz, Dec 91.
  - SPIRES interface done by George Crane.
- WWWizards created by Louise Addis, ~Jan 92.
- MidasWWW GUI browser designed and implemented by Tony Johnson, ~Nov 92.
- First experimental version of SLAC Home Page installed by Tony Johnson, Jul 92.
- First official version of SLAC Home Page installed by Joan Winters, Nov 93.
More Details of SLAC Page History

- SLAC three-page "core" model installed by Joan Winters and Kathryn Henniss, Dec 95.
  - Pat Kreitz contributed to major categories and Highlighted SLAC Home Page format.
  - Done under WWW Style & WWW-Tech.
- WWW Support Page redesigned into matrix, installed by Ruth McDunn and Joan Winters, Sep 96.
  - Done under WWWCC.

SLAC Home Page Layout

<table>
<thead>
<tr>
<th>&lt;title&gt; tag</th>
<th>Titling Info</th>
</tr>
</thead>
<tbody>
<tr>
<td>SLAC logo</td>
<td>Date</td>
</tr>
</tbody>
</table>

Top Button Bar

Orientation to "core"

SLAC Announcements

Contents*

Reference Info:
- SLAC Research
- Information from SLAC (including SPIRED)
- SLAC Computing and Communications
- SLAC Institutional Information
- SLAC Divisions, Groups, & Programs
- Useful Information Elsewhere

Footnotes

Disclaimer

Bottom Button Bar

Owner

* On Detailed only.
SLAC Home Page Comparison...

• Detailed has:
  – Table of contents.
  – Titling text separate from link text.
    • SPIRES exception.
  – Links gathered into horizontal lists.
  – Short link text, e.g., acronyms or page title subsets.

• Highlighted has:
  – Each major category as link to respective “Secondary” page.
  – Descriptive text for each major category.
  – 3“highlighted” links per category; 5 for Research.

...SLAC Home Page Comparison

• Highlighted also has:
  – Links selected by usage, dispersion, generality, public need.

• “Secondary” Highlighted SLAC Home Pages have:
  – Links gathered into vertical lists.
  – Expanded acronyms for link text.
“Functional” and “Organizational” Information Structures

- Structure by task or by organization chart.
  - Perils of finding a computing newsletter.
- Generally, put a “functional” link to major info once & only once in Reference part, e.g., Phonebook.
- Generally, put an “organizational” link to major info once & only once in Reference part, e.g., Public Affairs.
- Dual access, e.g., Theoretical Physics Interests & Theoretical Physics, Videoconferencing & Telecommunications.
- Support multiple access methods for the diverse audiences.

A Developer’s Feedback Access via the File System

Joan, Today I was working with the WWW telecommunications pages, and I noticed that once again I really appreciated certain conventions that you established and that we all follow quite consistently now, such [as] directory names in lower case and singular. It really takes a lot of the guess work out of generating and remembering names like: should it be singular or should it be plural? Beyond that, I also appreciate the clarity of organization: grp and functional page names make a lot of sense to me: if I know what I’m looking for but not necessarily that exact name, I can usually find it.

Ilse Vinson, 26 Jan 96
First Cut at SLAC Central Pages

- 3 Core Pages + Secondary SLAC Home Pages.
- Other SLAC primary Button Bar pages.
- "Introduction to WWW."
- "Getting Started at SLAC" & "Life at SLAC."
- "SLAC Announcements."
- "SLAC and Related Phone Directories."
- Major entries into functional space.
  - Experiments, Accelerator Research & Operations,
    SPIRES-HEP, BIS, Computing, Media Info, ...
- Highlighted SLAC links on Highlighted Home page.
- Many items on SLAC WWW Support page.
- Some aspects of Division, group, & program home pages.
- ...

Appendix B

Illustrative SLAC Home Pages through the Years
SLACVM Information Service

BINLIST
- SLAC phone book with e-mail addresses

HEP
- SPIRES HEP preprint database
SLACVM Information Service

BILIST
   SLAC phone book with e-mail addresses
HEP
   SPIRES HEP preprint database
STORES
   SLAC Stores Catalog
SLAC World Wide Web Information

The SLAC World Wide Web (WWW) service provides access to a wide range of information from a variety of sources both at SLAC and elsewhere. Information is provided in the form of hypertext which allows users to follow pointers from one item to other related items, and thus to access the information they need in a simple intuitive manner. Information is accessed using the TCP/IP network and can actually reside anywhere in the world, although the user does not need to know where the information comes from.

A number of different programs (called browsers) are available to access WWW information for different platforms including VM, VMS, Unix and NeXT.

SLAC information

SLAC SPIRES
Information is available on SLAC people (BILLISEP), HEP people (HEPNAME), HEP publications, as well as many additional topics.
Seminars
Seminars at SLAC and nearby, today, tomorrow, this week, next week, anytime.
SLD
Information specific to the SLD experiment.
FreeHep
Information on software available from HepLib.
VMS Help
Help information from SLACVX.

Other Information

See also HEP information (CERN, DESY etc.), academic information, APS News.

Support

The WWW at SLAC is supported by the SLAC WWWizards, to whom questions – comments – complaints etc. should be addressed. The WWW project was initiated and is supported by a group based chiefly at CERN.

SLAC World Wide Web Information

The SLAC WorldWideWeb (WWW) service provides access to a wide range of information from a variety of sources both at SLAC and elsewhere. Information is provided in the form of hypertext which allows users to follow pointers from one item to other related items, and thus to access the information they need in a simple intuitive manner. Information is accessed using the TCP/IP network and can actually reside anywhere in the world, although the user does not need to know where the information comes from.

A number of different programs (called browsers) are available to access WWW information for different platforms including VM, VMS, Unix and NeXT.

SLAC information

SLAC SPIRES
  Information is available on SLAC people (BINLIST), HEP people (HEPNAMES),
  HEP publications, PPF, BOOKS, as well as many other relevant topics.
  Abstracts and papers from bulletin-boards, posted yesterday, in the last seven days,
  a week before that, anytime.
Seminars
  Seminars at SLAC and nearby, today, tomorrow, this week, next week, anytime.
SLD, BES
  Information specific to SLAC experiments.
FreeHep
  Information on software available from HepLib.
General SLAC Computing
  Introduction to Computing at SLAC
SCS
  SLAC Computing Services Information.
VMS Help
  Help information from SLACVX.

Other Information

See also HEP information( CERN, DESY etc.), academic information, APS News.
17 Aug 1993
WorldWideWeb SLAC Home Page

SLAC 20 Dec 1993

Use the WorldWideWeb (WWW) service to gain access to a wide range of information at SLAC and elsewhere around the globe. Emphasized text like this is a hypertext link.

You may view WWW information through GUI or line-mode browsers. At least most SLAC pages have been tested on the MidasWWW X Window System browser. Note that over time links may move around on a page, migrate to others, or be removed entirely, due to the dynamic nature of the Web.

SLAC Information

People and organizations:
people at SLAC, people anywhere in HEP, institutions.

Physics Preprint Bulletin Boards (full-text postscript):
yesterday, last seven days, week before that, anytime.

Library:
PPF, SPIRES-HEP, Books, SLACspeak glossary, other databases.

Seminars:
today, tomorrow, this week, next week, anytime.

Conferences:
this month, next month, next year, next summer, all future, let me search.

News:

SLAC Physics Program

Experiments:
BaBar, BES, mO, SLD, other.

Accelerator operations logs:
yesterday, today, this week, anytime.

SLAC Computing

General computing:
Amiga, Macintosh, PC, UNIX, VM HELP, VMS Help:
FreeHEP, Futures, Local Area Networking, Network Reference, Security, SLACwide, other.

Group computing:
SCS, other.

Wide Area Networks:
BARRNet, BITNET, ESnet, HEPnet, Internet, other.

Other SLAC Information Resources

Annals, Laboratory facilities, Stores catalog, Telephone directory reference section, other.

Other Useful Information

http://www/archive/1994/SLACVM/www/192/rl3132/slac.2@html

Printed Sun Feb 9 17:26:10 1997
Other institutions:
Brown, CERN, DESY, Fermilab, LANL, LBL, SSC, more HEP;
Stanford University (Campus and the Medical Center);
AIP (FYI and Physics News Updates), NCAR, National MetaCenter for
Computational Science and Engineering, other.

Other information sources:
academic fields, hacker's jargon, GopherSpace, grab-bag, LISTSERV lists,
Netnews FAQs, other.

Support
WWW at SLAC is supported by the SLAC WWWizards, to whom you should address
questions, comments, complaints, etc. Some status information is maintained online, as
well as access to the Old SLAC Home Page and the Test SLAC Home Page. The WWW
Project was initiated at CERN, from which support is still coordinated. WWW
contributors currently come from diverse parts of the world. For more information see
WWW bibliography.

This page is intended for people experienced with WWW at SLAC ("refreshers").

This version was created by Joan Winters and evolved from part of the original SLAC
Home Page, created by Tony Johnson and updated by various SLAC WWWizards.

Winters
Sparsr SLAC Home Page

8 Aug 1995

[ People | Dense Home | Sparse Home | Sparser Home | Search | Getting Started | The Lab ]

[ SLAC Hot Topic | WWW Page Migration ]

Use the World Wide Web (WWW) to gain access to SLAC functional and organizational material as well as to diverse information elsewhere. Note that over time hypertext links may move around or disappear entirely.

- SLAC Research Programs
- Information from SLAC (including SPIRES)
- SLAC Operating Facilities
- SLAC Computing and Communications
- Other SLAC Programs
- SLAC Administrative Processes
- About SLAC
- SLAC Organization
- Useful Information Elsewhere

[ What's New | WWW Resources | Test Home | Suggestions | Stanford ]

Disclaimers, Copyright, and Other Fine Print

Winters
This page is primarily for SLAC researchers, collaborators, and staff. A shorter version, the top of a more hierarchical structure, is available by selecting the "Highlighted Home" button in the menu bar above. For help, see the "SLAC Introduction to WWW." For a more general introduction to the Lab, select the "SLAC Welcome" button.

**SLAC Announcements**

- 6 Feb 97  Alternatives to VM Publishing
- 3 Feb 97  End of General Service for VM on March 1
- 30 Jan 97  VM Phaseout Fair, Tuesday, Feb. 11, in the Auditorium
- 28 Jan 97  Comments Requested on Proposal for ISDN Service
- 21 Jan 97  Solicitation of Proposals by the FY 97 DOE Small Business Innovation Research (SBIR) Program

**Contents**

- SLAC Research
- Information from SLAC (including SPIRES Databases)
- SLAC Computing and Communications
- SLAC Institutional Information
- SLAC Divisions, Groups, & Programs
- Useful Information Elsewhere

---

**SLAC Research**

- Particle Physics Experiments:
  - BABAR, BES, E143, E144, E154, E155, mQ, SLD.
- Particle Astrophysics Experiments:
  - Group K.
- Synchrotron Radiation Experiments:
  - SSRL
- Accelerator Research & Development:
  - NLC, NLCTA, PEP-II, PPRC, SSRL. More Accelerator Research.
- Accelerator Operations:
  - Linac:
Yesterday*, Today*, This Week*, This Year*.
SPEAR:
Status.
Theoretical Physics:
Interests.

• Information from SLAC (including SPIRES Databases)

Public Information:
Welcome, Media Info, Awards, Employment Opportunities, Maps, Tours; WWW Conference.
Directories:
SLAC Phonebook, HEP Phonebook, HEP Institutions, SLAC X.500 White Pages, More Directories.
Databases:
SPIRES-HEP, Current PPF List, More Databases.
Recent E-Prints:
Today, Yesterday, Last Seven Days, Week before That, Let Me Search.
Conferences:
This Month, Next Month, Next Summer, Next Year, Let Me Search.
Newsletters and Periodicals:
Beam Line, ICFA Instrumentation Bulletin.
Software:
FreeHEP.

• SLAC Computing and Communications

Computing:
Platforms:
Mac, UNIX, Windows NT, VMS, VM Migration, More Platforms.
WWW:
Intro, Browsers, System Changes, More Support.
Topics:
Communications:
Computer Networking, Emergency, Telephone Services, Videoconferencing.

• SLAC Institutional Information

Site Information:
Getting Started.
Seminars:
Today, Tomorrow, All Future, Let Me Search, More Seminars.
Administrative Tools:
Admin Handbook, ELDREQ*, Stores Catalog; Stanford Admin Guide.
Organization-Wide Databases:
Buildings, CAPTAR, DRAW.
SLAC Home Page: Detailed

Library:

Newsletters and Periodicals:
Announcements, Business Briefs, The Interaction Point*, New Options for Wellness, Training Opportunities*.

USENET News:
slac.announce.important, More USENET News.

- SLAC Divisions, Groups, & Programs+

Director’s Office & Divisions:
Director’s Office; Business Services; Environment, Safety, & Health; PEP-II Asymmetric B Factory; Stanford Synchrotron Radiation Laboratory.

Groups, Departments, Etc.:

Programs:
Education, Summer Institute, SLUO.

Organization Charts:
SLAC; Business Services and ES&H, Research, SSRL and PEP-II, Technical; NLCTA, SCS, Technical Publications, Telecommunications.

- Useful Information Elsewhere

Physics:
HEP Experiments:
ALEPH, DELPHI, L3, OPAL; CLEO II; H1, ZEUS; CDF, D0; More Experiments Online.

HEP Institutions:
Brown (including The Virtual Review), CERN, Cornell, DESY, Fermilab, IHEP/China, LANL (including E-Prints), LBL (including PDG), LLNL, More HEP Institutions.

Professional Societies and Associations:
Scientific:
AAS, AIP, APS (including PACS and What’s New), NAS and More.
Computing:
ACM, BayCHI, BayLISA, HEPiX, UniForum, USENIX & SAGE.

Federal Resources:
DOE, FedWorld, the MetaCenter, NASA, NERSC, NSF, USGS, More Federal Agencies.

Local Area Resources:
Stanford University and its Libraries and Medical Center, More Local Area Resources.

Network Resources:
BBN Planet, Computer-Mediated Communication, CREN/BITNET, ESnet (including X.500 White Pages), HEPIC, JANET, References.

Other Information Sources:
Colleges and Universities, GopherSpace, Grab Bag, Hacker’s Jargor, LISTSERV Lists, USENET FAQs, the WWW Virtual Library (including Accelerator Physics).

* Access to this link is restricted to SLAC users.
+ Due to the dynamic nature of the Web, links may move around on pages, migrate to others, or be removed entirely. For example, when the "SLAC Divisions, Groups, & Programs" section gets large, we intend to move parts of it, e.g., "Groups, Departments, Etc.," off to another page.

[ Disclaimers, Copyright, and Other Fine Print | Acknowledgements ]

Winters
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**SLAC Announcements**

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**SLAC Research**

High-energy, particle, and synchrotron radiation physics; accelerator physics; accelerator operations; and theoretical physics; *e.g.*, **BABAR**, **SLD**, **SSRL**, **PEP-II**, and **Theoretical Physics**.

**Information from SLAC (including SPIRES Databases)**

Information for users worldwide, such as jobs, directories, databases, calendars, publications, and software, *e.g.*, **SPIRES-HEP**, **Today's E-Print**, and **FreeHEP**.

**SLAC Computing and Communications**

Computing resources, services, and plans; networking; and telecommunications; *e.g.*, **Platforms**, **Computer Networking**, and **Emergency Communications**.

**SLAC Institutional Information**

Site information; internal publications and communications; administrative tools; and library; *e.g.*, **Seminars**, **ELDREQ***, and **Books**.

**SLAC Divisions, Groups, & Programs**

Main organizational units, offices, and outreach efforts, *e.g.*, **Environment, Safety, & Health**; Technical Publications; and **Education**.

**Useful Information Elsewhere**

HEP experiments and institutions; professional societies; DOE and other federal, state, local, and networked resources; *e.g.*, **Experiments Online**, **APS What's New**, and **DOE**.
Winters
Particle Physics Experiments

- *BABAR*
- BEijing Spectrometer (BES)
- E143
- E144
- E154
- E155
- Millicharged Particle Search (mQ)
- SLD Experiment at the SLC (SLAC Linear Collider)

Particle Astrophysics Experiments

- Group K

Synchrotron Radiation

- Stanford Synchrotron Radiation Laboratory (SSRL)

Accelerator Research & Development

- Next Linear Collider (NLC)
- Next Linear Collider Test Accelerator (NLCTA)
- PEP-II Asymmetric B Factory
- Polarized Photocathode Research Collaboration (PPRC)
- Stanford Synchrotron Radiation Laboratory (SSRL)
- More Accelerator Research

Accelerator Operations

- Linac Logs:
  - Yesterday*
  - Today*
  - This Week*
  - This Year*
- SPEAR:
  - Status
Theoretical Physics

- Interests

Winters
Welcome to SLAC

The Stanford Linear Accelerator Center (SLAC) is a national basic research laboratory, probing the structure of matter at the atomic scale with x rays and at much smaller scales with electron and positron beams. The laboratory is operated by Stanford University under a contract from the United States Department of Energy (DOE).

The combined staff is currently about 1300, 150 of whom are Ph.D. physicists. Typically 800 physicists from universities and laboratories around the world participate in the high energy physics program and 800 scientists from universities and industrial laboratories are active in the synchrotron radiation program.

Points of Interest

What We Do

- About SLAC's Research Program;
- About SLAC's Experimental Facilities;
- A Bit of SLAC History

Learn About Science at SLAC
More on High-Energy Physics

- **Beam Line**, a quarterly journal of particle physics
- SPIRES-HEP Databases, including access to scientific papers by SLAC authors and others in the high-energy physics community

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**Disclaimers, Copyright, and Other Fine Print**

Last modified Mon Nov 25 08:40:32 PST 1996

*B. C. H. Quark*