

The Astronomy Department of IAG/USP on the Internet

30 years of scientific outreach

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Abstract. The website of the Astronomy Department at IAG/USP, created in 1994, has become a valuable tool for promoting its teaching and research activities, as well as being an important means of disseminating the astronomy research developed at the University of São Paulo. It provides the scientific community, the press, and the general public with reliable information about research, astronomical events, ephemerides, and outreach activities. Quality educational materials are also offered free of charge to all interested parties. This work shows the evolution of the website since its creation. Access to functional previous versions via links allows users to view its evolution and explore the content of earlier versions from the beginning, providing a conceptual and graphical journey from the site's origin to the present.

Resumo. O site do departamento de astronomia do IAG/USP, criado em 1994, tornou-se uma ferramenta valiosa de divulgação de suas atividades de ensino e pesquisa, além de ser um importante meio de divulgação da astronomia desenvolvida na Universidade de São Paulo. Ele oferece à comunidade científica, imprensa e público em geral informações confiáveis sobre pesquisas, eventos astronômicos, efemérides e atividades de extensão. Materiais didáticos de qualidade são também oferecidos gratuitamente a todos os interessados. Este trabalho mostra a evolução do site desde sua criação. O acesso a versões anteriores funcionais através de links permite visualizar sua evolução e explorar o conteúdo das versões anteriores desde o início, proporcionando uma viagem conceitual e gráfica da origem do site até o presente.

Keywords. Teaching of Astronomy – History of Astronomy

1. Introduction

The academic internet emerged in the late 1980s in the United States, initially through the Bitnet network. In Brazil, the first academic internet network appeared in the following years, stemming from pioneering initiatives to integrate universities, initially between the National Laboratory for Scientific Computing (LNCC), USP, and UFRJ. In January 1991, the São Paulo Research Foundation (FAPESP) began receiving the first internet data from abroad, and in the following year the United Nations Conference on Environment and Development held in Rio de Janeiro enabled, for the first time, the National Research Network (RNP), a federal government body, to organize internet connectivity for an international event hosted in Brazil.

At the University of São Paulo, the early years of the 1990s marked the beginning of the connection of various institutes to the network. IAG, at that time known as the Astronomical and Geophysical Institute, implemented the first initiatives to connect its departments and the Institute to the internet during this period, with the Department of Astronomy launching the first version of its web pages in 1994.

2. The beginning: 1994 – 97

In 1994, when the internet was in its early stages in Brazil, the author of this work created a website for the Department of Astronomy at IAG upon request of the department head. At that time, there were no specific tools for editing; the HTML code was written in a simple text editor, based on instructions obtained from the few informational pages available. The first version of the site only provided the address, contact details, and links to other institutional pages. The heavy visual style, with a dark background, is typical of websites from that era. Fig. 1



FIGURE 1. Department of Astronomy website in April 1997.

shows the first available version from April 1997; the initial version from 1994 was lost.

3. The consolidation: 1998 – 2000

In 1998, a new version of the page was developed, incorporating significant advancements. In addition to the address and contact information for the department, the informative nature of the site was solidified with the presentation of teaching and research activities and a history of IAG. A list of links to sites of interest was included, such as the Brazilian Astronomical Society and professional astronomy websites in Brazil and abroad. An English version was introduced, and the "Ask an Astronomer" service, which is still available, was launched. The version from this period, shown in Fig. 2, is from October 1999.



FIGURE 2. Department of Astronomy website in October 1999.



FIGURE 3. Department of Astronomy website in June 2003.

4. A new site for a new century: 2001 – 2006

The 2001 version features a striking graphic renewal, moving away from the dark and heavy color schemes of the previous decade. The site adopts a more user-friendly layout, with a vertical menu on the left for better organization of content, divided into research, teaching, and outreach. The research section includes a description of research activities, information for the postdoctoral program, catalogs and databases, and a collection of links to professional astronomy websites. The undergraduate, graduate, and extension programs are described, and the availability of educational and outreach materials is also introduced. The substantial amount of information available made the site an effective tool for those interested in astronomy at all levels, from professionals to the general public. The version from this period, shown in Fig. 3, is from June 2003.

5. A major reformulation: 2007 – 2015

In 2007, after six years without major changes, the website underwent a complete redesign, adopting a more minimalist look that followed the visual trends of the time. A top horizontal menu was introduced to facilitate quick and precise searches, dividing the content into easily understandable themes for the public. This was the last version developed by this author in an amateur capacity. The available version from this period is from December 2009, shown in Fig. 4, which includes the logo of the International Year of Astronomy, celebrated that year.

6. The professionalization: 2016 – 2023

Starting in 2016, the IAG website began to be developed by specialized technicians with specific training in web design. The structure with the top horizontal menu that divides content by areas was maintained; however, elements such as a rotating banner on the homepage showcasing relevant events and a central



FIGURE 4. Department of Astronomy website in December 2009.



FIGURE 5. Department of Astronomy website in June 2023.

menu for News and Events from the department was added. This organization allowed for the inclusion of a much larger volume of information on the website's homepage. The available version from this period is from June 2023, shown in Fig. 5.

7. In conclusion. The current version: 2023 –

In 2023, the website was updated and redesigned, reaching its current version (as of October 2024). This version integrates the content of the three IAG departments more cohesively and also includes flexible responsiveness, making the site accessible on mobile devices without loss of quality. This change has become essential for today's internet, as most accesses to websites are now made through devices like mobile phones and tablets. In addition to the horizontal menu, content is distributed vertically as the page is scrolled. The presentation of more images and colors makes the page more modern and appealing.

The link in this line is the current version of the Department of Astronomy website at IAG/USP.