



The UW Pre-Major in Astronomy Program (Pre-MAP)

Marcel Agüeros, Columbia U.



Why Pre-MAP?

- **Attract underrepresented students to the UW Department of Astronomy**
- **Smooth transition from high school into college, and from first year into (STEM) major**
- **Provide exciting astronomy research opportunities and committed mentoring**



What Does Pre-MAP Do?

Dedicated team helps students:

- Connect to astronomy research projects
- Identify resources & opportunities at UW
- Navigate UW bureaucracy
- Make their first year a success





The Intro Course: Astro 102

ASTR 102 Introduction to Astronomy (5)

“Emphasis on mathematical and physical comprehension of nature, the sun, stars, galaxies, and cosmology. Designed for students who have had algebra and trigonometry and high school or introductory level college physics...”





The Pre-Map Seminar

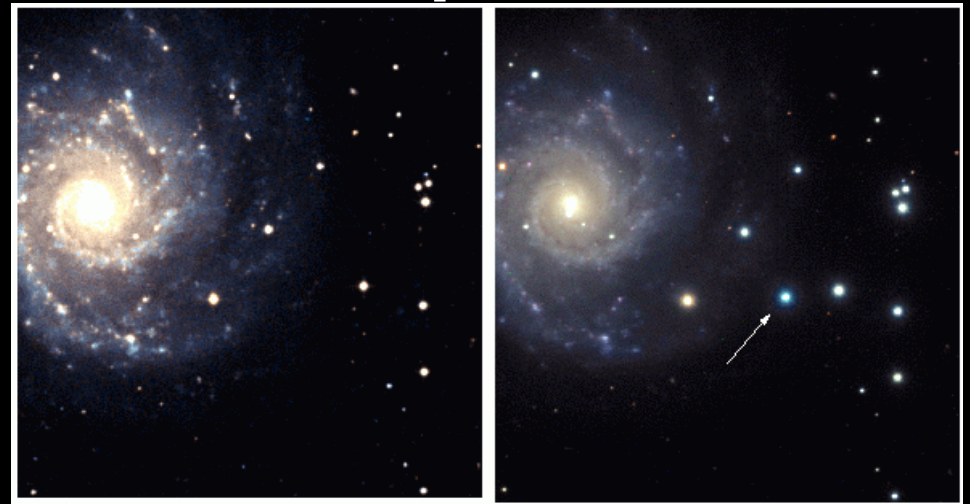
ASTR 190C Topics in Astronomy (3)

- Tutorials & homework introduce research tools and introductory computing skills
 - Students pick a research project & work in groups of 2-3 for 2nd half of the quarter
 - Give final presentations to the class & faculty advisors about research
-
- Continue with research after 1st quarter if they enjoy the project
 - Present research at undergraduate research symposium in the spring



Sample Research Project: Supernova Search with SDSS

- **Supernovae** (SN) are distant explosions of dying stars
- They are some of the brightest & most violent events
- Use new Sloan survey data and, by subtracting images, look for bright new objects that might be Supernovae!





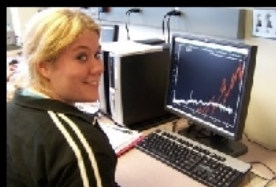
Pre-MAP's First Two Cohorts

Pre-MAP

A program to introduce underrepresented first-year college students at the University of Washington to astronomy research

[Home](#)[Join](#)[Students](#)[Projects](#)[Staff](#)[Links](#)

Pre-MAP
Website



What is Pre-MAP?

The **Pre-Major in Astronomy Program (Pre-MAP)** is a new program housed in the University of Washington Astronomy Department that started Autumn 2005. **Pre-MAP** is for entering UW students who are interested in math and science and who are traditionally underrepresented in astronomy (women, African Americans, Latinos, Native Americans, Southeast Asians, Pacific Islanders, low-income and first-generation college students). See our [students page](#) to meet the Pre-MAP students.

Graduating high school seniors who wish to participate in **Pre-MAP** register for **Astronomy 102**, an introductory course taught in the Autumn quarter. They also register for a 3 credit seminar, **Astronomy 190B**, led by a specially trained graduate student. See our [page on how to join Pre-MAP](#) for details.

Our **Pre-MAP** students have a unique opportunity to learn astronomical research techniques and apply them to research projects conducted in small groups. These projects involve the use of cutting edge facilities and/or data available to UW astronomers, such as the Apache Point Observatory in New Mexico or the Sloan Digital Sky Survey (SDSS) database. Check out the [sample research projects page](#) for some examples.

In addition, every **Pre-MAP** student receives one-on-one mentoring and peer support for at least the duration of the academic year, and has an opportunity to continue or expand their research project.

Interested? Then please fill out our [online information form](#).

Pre-MAP in the news:

- **UW College of Arts & Sciences newsletter: [A Jump Start for Science Students](#).**
- **The Daily: [Astronomy program seeks to increase diversity](#).**

Pre-MAP is modelled on the UW's highly successful Freshman Interest Group (FIG) program, and was one of 13 programs recently funded by the UW's President's Diversity Appraisal Implementation Fund. Our proposal describes **Pre-MAP** in gory detail. Check out one of our recent presentations about Pre-MAP--it summarizes the program nicely.

We recently submitted a report on the first two years of Pre-MAP to the [Office of Minority Affairs](#). Read it [here](#).

If you have any questions, or need more information about Pre-MAP, please contact us:
premap@astro.washington.edu



The Future





Questions?

see

<http://www.astro.washington.edu/premap>