

# *The* Friends of PlanetQuest

## *Newsletter*

Vol. 1, No. 3

### **The PlanetQuest Mission:**

**To inspire the people of the world with the thrill of individual discovery, a better understanding of our uniquely precious planet, and a wider perspective on our place in the universe.**

Dear Friends,

We have had a most amazing and fruitful month, as you probably know if you've been keeping an eye on our website. Support, new collaborations and proposed collaborations, a new member of the Board of Directors, additional telescope time, offers from you, our Friends of PQ, to contribute to our website...it's a long list, very heartening, and keeping us quite busy!

And speaking of our website, we are always interested in your thoughts, ideas, suggestions, and feedback. Feel free to send comments or ideas to us at [info@planetquest.org](mailto:info@planetquest.org).

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## News

Well, we have made news again! In April, at a meeting with Chabot Space and Science Center to tell them about PlanetQuest and to discuss possible educational collaborations, we met British software entrepreneur Dill Faulkes, who, having a passion for public education in the sciences, was quite interested to hear of our venture. After meeting with our Board of Directors member Jeremy Crandell, President Laurance Doyle, and Executive Director Dave Gutelius, Dr. Faulkes was so enthusiastic about our mission that he gave us two-thirds time access to two identical, world-class 2-meter telescopes—one on the island of Maui, Hawaii and the other at Siding Spring, Australia. He built these telescopes, at a cost of \$20 million, for a math and science education venture he created and funded in Great Britain in the late 1990s called the Faulkes Telescope Project. Both telescopes can be operated robotically and controlled over the Internet using a normal PC.

Needless to say, we are thrilled at what this can do for our ability to bring millions of stars to PlanetQuesters searching for planets. The Faulkes Telescopes will enable us to observe millions more stars now, to be able to observe much fainter (and therefore more of the smaller and sun-like) stars, and to be able to detect smaller planets (approaching terrestrial-type). See the complete story at <http://planetquest.org/news/releases/index.htm>.

You'll find photos of the telescopes at <http://www.faulkes-telescope.com/> as well as on our site. Dr. Faulkes has also joined our Board of Directors.

## Educational Collaborations

PlanetQuest is attracting a lot of attention from educational quarters. As mentioned above, Chabot Space and Science Center in Oakland, California, invited us to come and give a presentation about who we are and what we hope to accomplish. As education is a major interest of PlanetQuest—not just for people in colleges or universities, but for all—as well as for Chabot, a collaboration between us is natural and exciting. We are also in discussions with two other well-known organizations regarding possible fits between our activities and goals, and hope to soon have more news regarding these possibilities.

## The Collaboratory Project

We continue to make good progress toward our beta-version Collaboratory, with important breakthroughs in optimizing the Transit Detection Algorithm (TDA) for compatibility with the open-source BOINC distributed computing platform. The stellar modeler is being built now and being run against data to test for accuracy and speed. It's certainly exciting to see the various bits of the Collaboratory finally coming together. Alpha testing is going well so far, and thank you to all those who offered their computers (we're keeping the alpha in-house for now). Our next big steps include porting the Collaboratory to all of those wonderfully diverse computing platforms, and helping the BOINC project with some important issues.

PlanetQuest Cofounder and Executive Director David Gutelius is also working with the PQ team on enhanced feature sets for the software. While we can't tell you much about them quite yet, they'll make you feel like you're a part of the universe and allow you to meet other folks in some really innovative ways. More leaked soon!

## Astronomy and Observing

Literally moments after we sent out our last newsletter, we received word from Siding Spring Observatory in Australia that our proposal for a study to evaluate a way to detect planets around binary stars by eclipse-minima timing had been accepted. We have time on the 1-meter there from approximately mid-June to mid-July. This is an exciting proposal, as, if the method proves successful, it will be a **new way to detect planets** around other stars.

And, of course, we will begin to use the two robotic Faulkes Telescopes very soon. We will be able to operate these 'scopes while at the same time observing from the Crossley at Lick Observatory as well as while observing from the 1-meter at Siding Spring. Two 2-meter telescopes will provide us with an incredible increase in the number of stars we'll be able to observe.

We have entered the final design phase for the new field-corrector/reducer and prime-focus spider mount for the Crossley 0.9-meter telescope at Lick Observatory where we have been given four months of observing time to acquire data on stars for your transit studies in the galactic plane (we are starting in the constellation Cygnus this year—the same region that the NASA Kepler spacecraft will be pointing at after its launch in June 2008).

## Website

Some of you have offered, and some have already completed, translated portions of our website into other languages, and we are truly excited about this! Our dream from the beginning has been to offer all of our information in as many of the world's languages as possible. Those of you who have offered to help with this will be hearing from us very soon.

We have updated and increased the amount of information and photos on the telescope pages on our website. For a good look at the telescopes we'll be using, see <http://www.planetquest.org/about/facilities/>, especially the Northern and Southern Hemisphere pages.

As you'll see, we have some of our "Learn" pages up (<http://www.planetquest.org/learn/>), and will continue to add more as we are able. These are not as we will present our education pages in the long run, but the quality of the information and the photos was worth putting up while we proceed with our project.

## Television

Look for PlanetQuest President Laurance Doyle on an upcoming National Geographic special called *Extraterrestrial*. While the show does traverse into science fiction, it gets there from a sound basis through discussions with scientists and astronomers about what the possibilities are for life around another star. The program will air in two parts during May. The first fifteen minutes of each show are the most science-packed, with discussions of circumstellar habitable zones around the smallest stars, stellar flares, and a bit about modeling of tidally locked extrasolar planets' atmospheres. Then it's on to interestingly weird alien creatures struggling for dominance in a harsh environment.

## Our Fundraising Efforts

Do you want to help build an organization that changes lives and inspires people on a global basis? If you are someone or know of someone who would relish the opportunity to make a difference and bring positive change to our world, please consider a contribution to PlanetQuest (we've made this easy right on our website at <http://www.planetquest.org/support/>), or tell someone else about us. Even small donations can make a big difference, so please spread the word and consider making a secure subscription donation each month. For those thinking of contributing on a large scale, we are happy to meet with you and explain our project in more detail. We are a registered 501(c)(3) US nonprofit organization, so your donations are completely tax-deductible. As always, thank you for your interest, enthusiasm and support!

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## Quote of the Month

"People like you and I, ...do not grow old no matter how long we live. What I mean is that we never cease to stand like curious children before the great Mystery into which we were born."

Albert Einstein to Otto Juliusburger (1942)

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Best Wishes,

Laurance Doyle, PhD  
President and Cofounder

David Gutelius, PhD  
Executive Director and Cofounder

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