

Distributed Computing with the **B**erkeley **O**pen **I**nfrastructure for **N**etwork **C**omputing



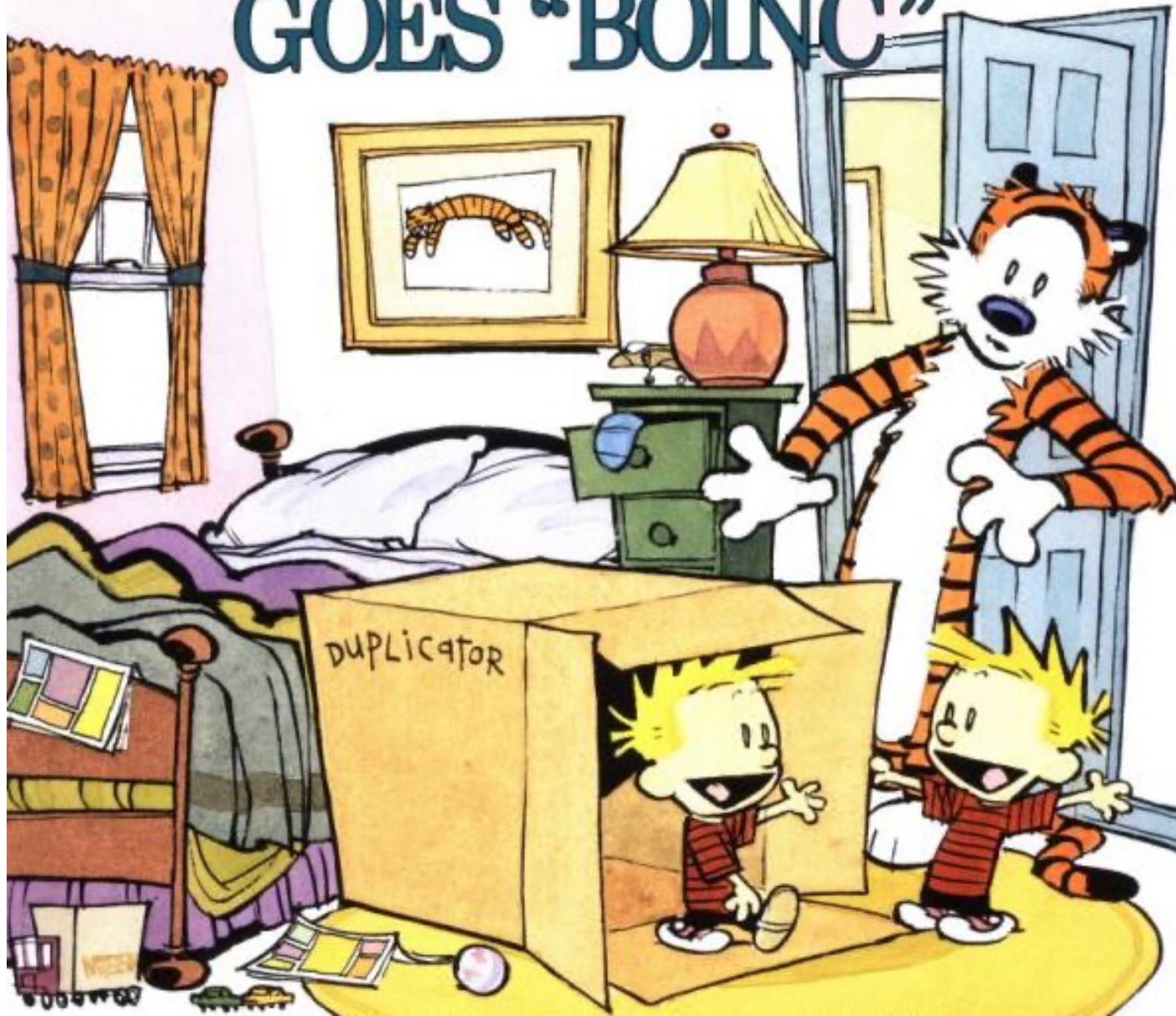
Eric Myers

1 September 2010

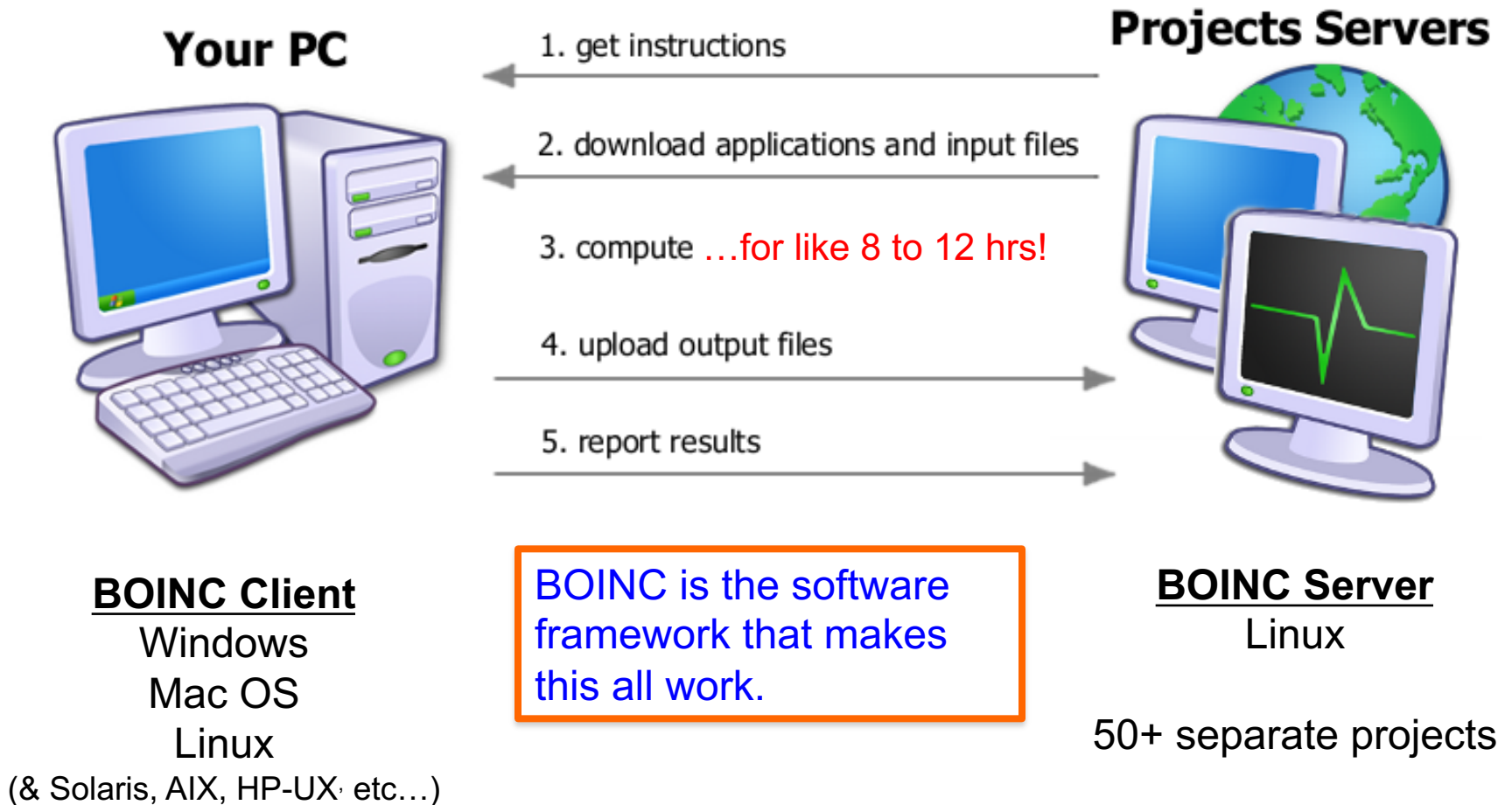
Mid-Hudson Linux Users Group

COVID-19 Update
8 July 2020

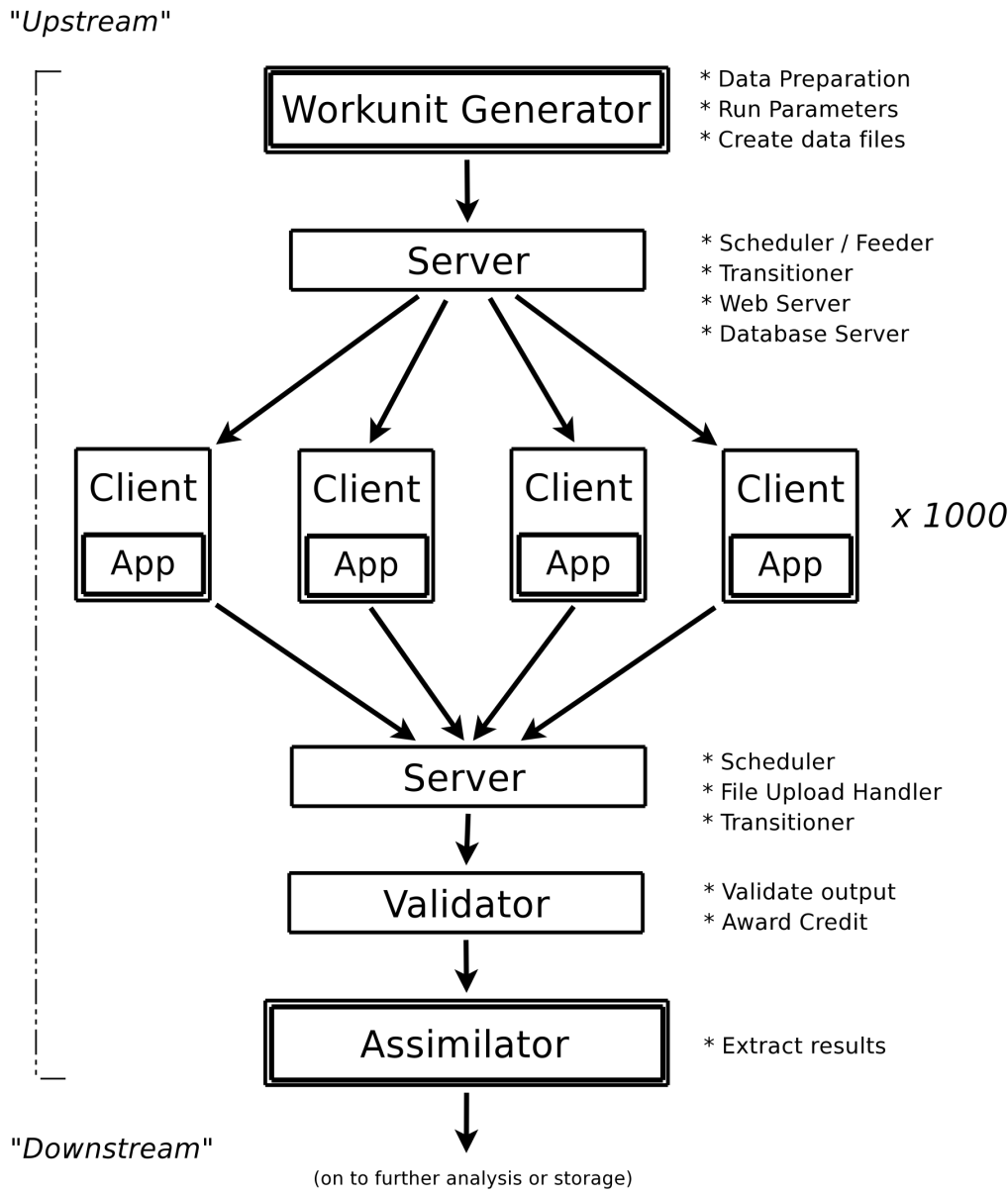
SCIENTIFIC PROGRESS GOES "BOINC"



How BOINC Works



BOINC Dataflow



What is SETI@home?

SETI@home is a scientific experiment that uses Internet-connected computers in the Search for Extraterrestrial Intelligence (SETI). You can participate by running a free program that downloads and analyzes radio telescope data.

SETI@home is "paused" in 2020



PARTICIPATE

Download
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Tell a friend
Donate
Porting & optimization
... more

ABOUT

About SETI@home
About Astropulse
Science newsletters
Technical news
Server status
Science status
Sponsors
... more

COMMUNITY

Message boards
Questions & answers
Profiles
User search
Teams
Web sites & IRC
Pictures & music

YOUR ACCOUNT

Your account
Preferences
Certificate

STATISTICS

Top participants
Top computers
Top teams

Site search:

[Languages](#)

Get started

1

[Read our rules and policies](#)

2

Download, **install** and **run** the BOINC software used by SETI@home. When prompted, enter the URL:
<http://setiathome.berkeley.edu>

Have questions or need help? Contact a volunteer using [BOINC online help](#).

Special instructions:

- [For SETI@home Classic participants](#)
- [For users of command-line and pre-5.0 clients](#)

News

Weekly Outage and Initial Catch Up

Every Tuesday morning ([Pacific time](#)) we begin a 3 day data distribution outage to focus on science processing and development plus any needed systems maintenance. The upload/download servers will be offline during this time. The web site (including the forums) will only be offline during the database maintenance and backup portion of the outage. On Friday, you may experience connectivity issues as the servers catch up with demand. 6 Aug 2010 19:07:50 UTC

Don Backer has passed away.

Don Backer, Berkeley professor and director of the Allen Telescope Array, passed away on Sunday, July 25th. Don was a very important contributor to radio astronomy and to the study of pulsars. He will be missed.

27 Jul 2010 0:36:12 UTC · [Comment](#)

Arecibo Observatory Repair Status

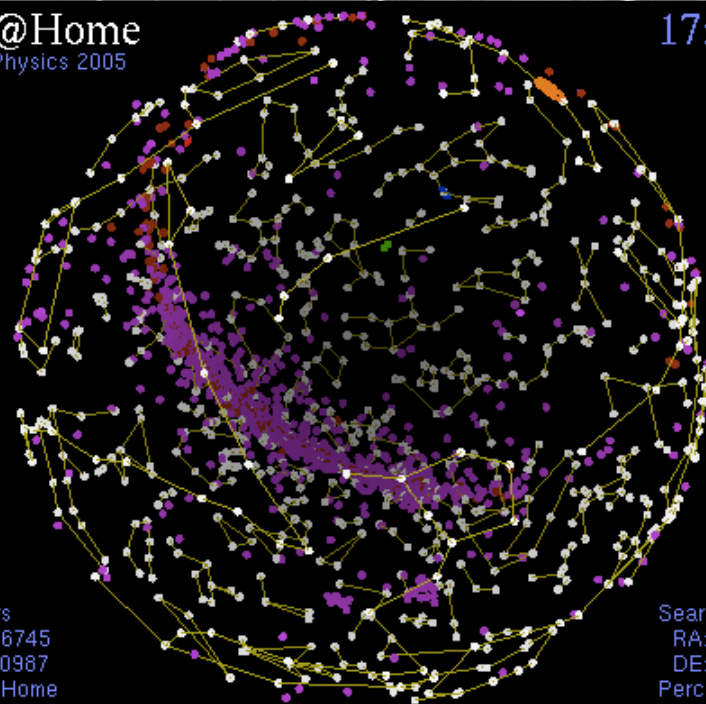
A structural failure at the telescope on February 3rd was partially repaired in March, and we've been observing with reduced motion since then. The next phase of repairs is slated to start July 12th and may take up to 6 weeks for full



EINSTEIN@HOME

Einstein@Home
World Year of Physics 2005

17:58:53



User: Eric Myers
Total credit: 376745
Host credit: 50987
Team: Pirates@Home

Search information:
RA: 58.67
DE: 41.83
Percent done: 0.200%

About Einstein@Home

Thank you for your interest in Einstein@Home!

Einstein@Home is a program that uses your computer's idle time to search for gravitational waves from spinning neutron stars (also called pulsars) using data from the LIGO gravitational wave detector. Learn about this search at einsteinathome.org, [Einstein Online](#) and in our [S3 report](#).

Einstein@Home also searches for radio pulsars in binary systems, using data from the Arecibo Observatory in Puerto Rico. Read more about this search [here](#).

Einstein@Home is a World Year of Physics 2005 and an International Year of Astronomy 2009 project supported by the American Physical Society (APS) and by a number of international organizations.

If you would like to take part, please follow the "Join Einstein@Home" instructions to the left. Einstein@Home is available for Windows, Linux

News

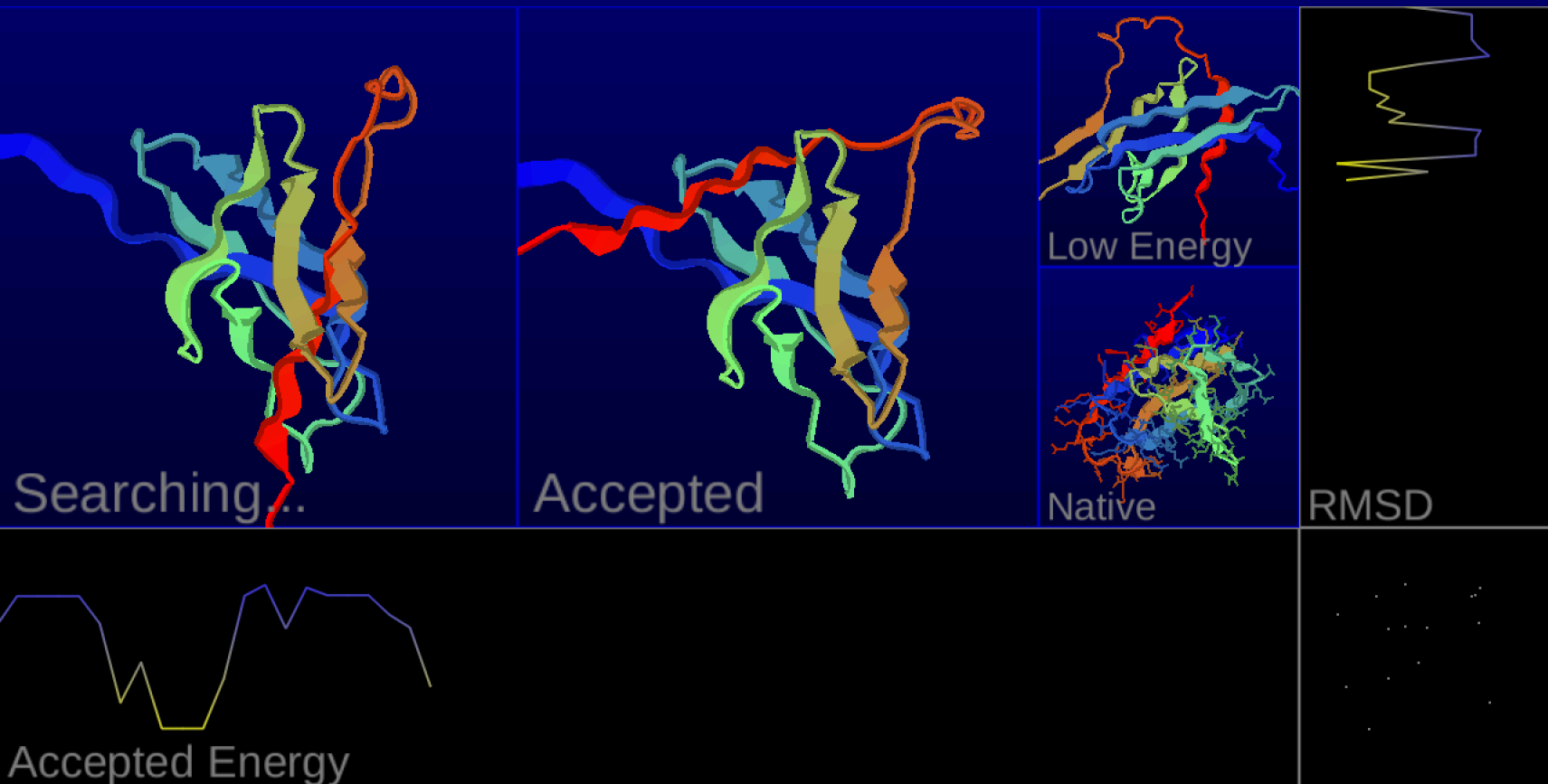
First Einstein@Home Discovery!

We are delighted to announce that Einstein@Home has made its first discovery: a radio pulsar, found in data from the Arecibo Observatory in Puerto Rico.

Details are available in a paper published online by Science today. Science has given us permission to post a copy of the [abstract](#) and [paper](#) here. They are also on the Science website [here](#). The manuscript is also in the [arXiv preprint](#) archive (use the PDF link in the top right corner).

**78 new pulsars
detected by 2020**

Rosetta@home



c18956ae fold SAVE ALL OUT 951790 135

Stage: SmoothFragmentMover_GunnCost

CPU time: 0 hr 2 min 5 sec

Eric Myers - Total credit: 104678 - RAC: 1323.84

Pioneer Academics

0.19% Complete

Model: 1 Step: 149103

Accepted Energy: -37.56851

Accepted RMSD: 16.11

Low Energy: -45.26525

Low RMSD: 16.09

Rosetta@home v4.2 <http://boinc.bakerlab.org/rosetta/>



world community grid.
technology solving problems

We're helping develop affordable solar energy.

What are you doing?

Why not donate your unused computer time to World Community Grid and The Clean Energy Project to help discover new materials that efficiently capture and store solar radiation as energy for later use?

[> Learn More](#)

Join Today!

As of 2010

The Clean Energy Project

Active

- The Clean Energy Project - Phase 2
- Help Cure Muscular Dystrophy – Phase 2
- Help Fight Childhood Cancer
- Help Conquer Cancer
- Human Proteome Folding - Phase 2
- FightAIDS@Home

Intermittent

- Discovering Dengue Drugs - Together - Phase 2
- Influenza Antiviral Drug Search
- The Clean Energy Project
- Discovering Dengue Drugs - Together

Funded and operated by IBM

Completed

- Nutritious Rice for the World
- AfricanClimate@Home
- Help Cure Muscular Dystrophy
- Genome Comparison
- Help Defeat Cancer
- Human Proteome Folding

To Join:

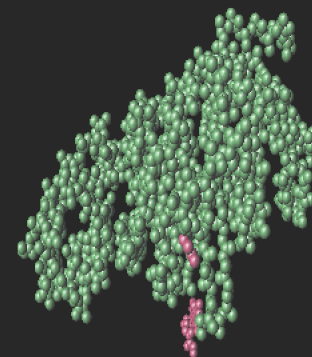
1. Download BOINC
2. Run BOINC Manager
3. Tools -> Add Project



OpenPandemics - COVID-19

COVID-19 is a highly communicable disease that can cause severe respiratory problems, and even death. The disease has affected people and communities all over the world.

Your device is screening a chemical compound that could potentially be an effective treatment for COVID-19.

The graphic features a central globe with various scientific icons: a DNA helix, a chemical structure with a benzene ring and substituents (R₁ and F), a pill blister pack, a test tube with blue liquid, a test tube with purple liquid, a test tube with red liquid, a test tube with yellow liquid, a cell, a virus, and a microscope. The background is dark with a grid pattern.

- Protein target
- Candidate being evaluated

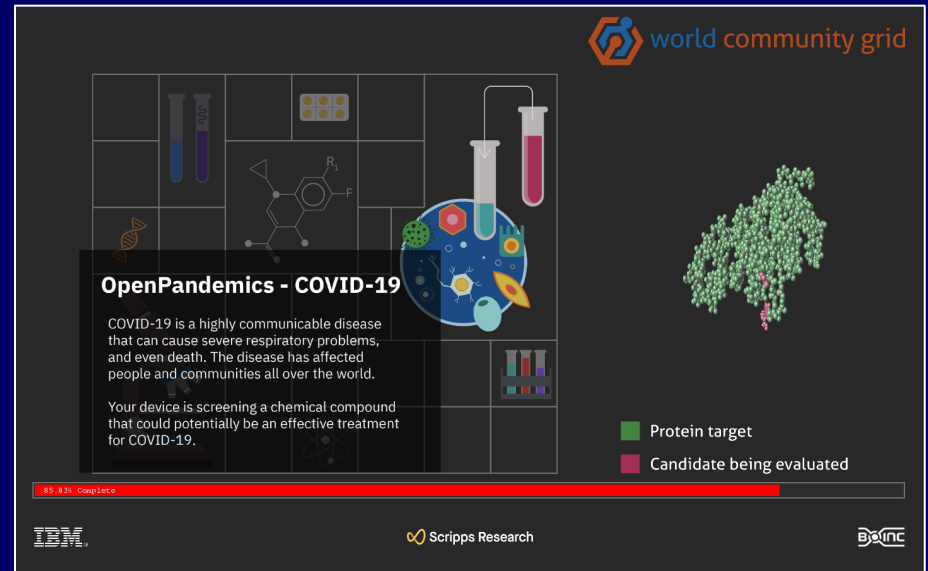
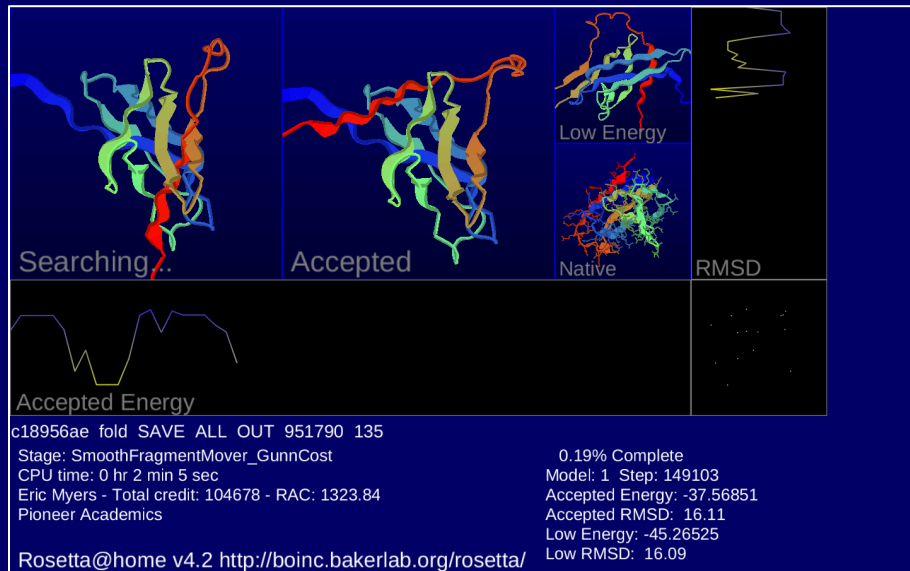
85.83% Complete

Call to Action!

Use your spare cycles to help fight COVID-19

Rosetta@home

World Community Grid OpenPandemics - COVID-19



Rules and Policies

Run BOINC only on authorized computers

Run BOINC only on computers that you own, or for which you have obtained the owner's permission. Some companies and schools have policies that prohibit using their computers for BOINC.

Is it safe to run BOINC?

Any time you download a program through the internet you are taking a chance: the program might have dangerous errors, or the download server might have been hacked. The well-known BOINC projects make efforts to minimize these risks. They test their applications and configure their servers to be secure.

The applications run by some BOINC projects may cause some computers to overheat. If that happens, stop running BOINC, or you can use the `cpulimit` utility to throttle CPU usage.