

Adler Planetarium's Citizen Science Initiative *Zooniverse* Celebrates 10 Years of People-Powered Discovery with Launch of 100th Project

May 31, 2017—*Zooniverse*, an initiative co-led by the Adler Planetarium and the University of Oxford that utilizes volunteer "citizen scientists" from across the globe, is celebrating its 10th anniversary this year. *Galaxy Zoo*, its first project launched in 2007, asked volunteers to classify galaxies based on their shape. Classifications from the public proved better than both experts and computers. Today, *Zooniverse* has 1.5 million registered users around the world who work alongside professional researchers to achieve their research goals that would not be possible or practical otherwise. Garnering more than 145 million classifications to date, *Zooniverse* has become the world's largest and most popular platform for people-powered research.

"What makes *Zooniverse* particularly exciting is that our citizen scientists, five year olds to 95 year olds, are in the driver seat of discovery," said Dr. Laura Trouille, Director of Citizen Science at the Adler Planetarium. "In our astronomy projects alone, *Zooniverse* volunteers have been the discoverers of the first planet in a four-star system, an exotic pulsar, dozens of gravitational lenses, over 1,000 new supernovae candidates, the rare, ghost remnants of supermassive black hole outflows, and much more."

Coinciding with its 10th anniversary celebration, today *Zooniverse* launches its 100th project, *Galaxy Nurseries*. By taking part in *Galaxy Nurseries*, citizen scientists across the world will help the *Zooniverse* team discover thousands of new baby galaxies in the distant Universe. Volunteers will be identifying features called "emission lines" in galaxy spectra captured by the Wide Field Camera 3 carried by the Hubble Space Telescope. A spectrum is produced by decomposing the light that enters a telescope camera into many different colors (called wavelengths). The data allows scientists to find new galaxies (from the images) and measure their distances (using the spectra).

To join in the discovery of *Galaxy Nurseries*, visit https://www.zooniverse.org/projects/hughdickinson/galaxy-nurseries

Since its launch, *Zooniverse* has supported 100 projects that span multiple fields of study, including astronomy, ecology, biomedical research, climate science, history, and the humanities. *Zooniverse* volunteers span the globe—fifty percent from the United States, ten percent from the United Kingdom, and forty percent from the rest of the world. When asked why they participate, the overwhelming response from *Zooniverse* volunteers was the opportunity to contribute to science.

Discoveries have included a planet called PH1, which is described as a Tatooine-type planet because it has two sun-like stars in its four star system; Hanny's Voorwerp, outflows from a black hole inside a spiral galaxy; glitches in the LIGO detector searching for gravitational waves that help prove Einstein's theory of relativity via the *Gravity Spy* project, and a recent discovery of a four-earth-like planet

system around a sun-like star via the *Exoplanet Explorers* project. In addition, *Zooniverse* projects have led to over 100 peer-reviewed publications.

In 2013, *Zooniverse* was the recipient of the prestigious Google Global Impact Award. The award supports organizations using technology and innovative approaches to tackle some of the toughest human challenges. It is awarded annually to nonprofit organizations with a specific project that tests a big, game-changing idea.

As a result of the the \$1.8 million Google Global Impact Award, *Zooniverse* rebuilt its platform so that groups with no web development expertise can build and launch their own citizen science projects. In July 2015, *Zooniverse* launched the DIY *Zooniverse* Project Builder. Since its launch, over 2000 projects have been created with 36 having passed review and launched on Zooniverse.org/projects. 30 more are currently under review. To build your own *Zooniverse* project, go to: https://www.zooniverse.org/lab

To learn more about *Zooniverse*, and to become a volunteer citizen scientist visit <u>https://www.zooniverse.org</u>

About Zooniverse: Zooniverse is the world's largest and most popular platform for people-powered research. This research is made possible by volunteers—1.5 million registered users around the world—who come together to assist professional researchers whose research goals would not be possible, or practical, otherwise. *Zooniverse* research results in new discoveries, datasets which are useful to the wider research community, and numerous publications.

Zooniverse is led by the University of Oxford and Chicago's Adler Planetarium in close collaboration with the member institutions of the Citizen Science Alliance, with particular leadership from the University of Minnesota-Twin Cities and the University of Portsmouth. *Zooniverse's* platform for people-powered research has been made possible through funding which includes support from the NSF, NASA, IMLS, NOAA, the Alfred P. Sloan Foundation, a Google Global Impact Award, Microsoft, STFC, the European Union, and the Leverhulme Trust.

About the Adler Planetarium:

The Adler Planetarium—America's First Planetarium—is more than a museum; it is a laboratory, a classroom, and a community exploring the Universe together. Each year, nearly 570,000 visitors experience the museum's interactive exhibitions, live planetarium shows, hands-on, minds-on STEM education programs, and world-class collections. Founded in 1930 by Chicago business leader Max Adler, the Adler Planetarium is a recognized leader in public engagement. The museum's scientists, historians, and educators inspire the next generation of explorers and invite you to explore space with us.