

Trips / Events

Ideas for trips and events
always welcome!

events@weymouthastronomy.co.uk

- ◆ 15 Feb CADAS—Graham Bryant: Pluto: from myth to discovery and the New Horizons mission
- ◆ 28 Feb BNSS— Ron Westmass: Rocks from Space—things that go bump in the day and night
- ◆ 7 Mar WAS—A life on Mars—Bud Budzynski
- ◆ 15 Mar CADAS—John Gifford: Astronomy before relativity
- ◆ 18 Mar BNSS—James Fradgley: BadScience—Things one hears that annoys me
- ◆ 4 Apr WAS— Chris Starr: Dawn of the Solar System
- ◆ 19 Apr CADAS—Bob Mizon: Eight great astronomers

More events to come in 2017.

Programmes for many local Societies will be available in the near future. Check their websites for more details.

WAC Upcoming Events:

- 10 Mar—Time—Paul Spurr
- 7 Apr— A life on Mars—Bud Budzynski
- 12 May— AGM—Binocular Astronomy—Stephen Tonkin
- 9 June—Ask the Panel

More to come in 2017!

Plans for informal viewing nights will take place after the monthly meetings, weather permitting.

Sky Watcher

WAC News—

GREEN COMET APPROACHES

EARTH: A small comet named "45P/Honda-Mrkos-Pajdusakova" (45P for short) is approaching Earth. At closest approach on **Feb. 11th**, the comet will be 7.4 million miles from our planet, visible in binoculars and small telescopes.

According to the Minor Planet Center, this is the 8th closest pass of any comet in the modern era (since ~1950, when modern technology started being used to study comets). It will only be 31 times farther from Earth than the Moon. Interestingly, 45P made an even closer approach on its previous orbit (23 lunar distances), so it is also on the list as the 5th closest. Proximity makes the comet bright despite its small size. Forecasters say 45P could be on the verge of naked eye visibility (6th magnitude) when it emerges into the pre-dawn sky later this week. The best time to look is during the dark hours before sunrise between Feb 9th and 12th. The comet will be racing through the constellation Hercules high in the eastern sky. Check Space-weather.com for more details and sky maps. Until next month ~SK



Comet Campaign: Amateurs Wanted

By Marcus Woo

In a cosmic coincidence, three comets will soon be approaching Earth—and astronomers want you to help study them. This global campaign, which will begin at the end of January when the first comet is bright enough, will enlist amateur astronomers to help researchers continuously monitor how the comets change over time and, ultimately, learn what these ancient ice chunks reveal about the origins of the solar system.

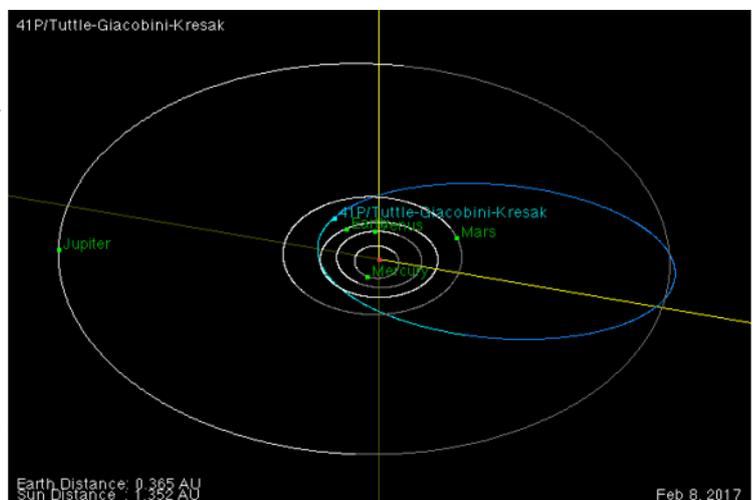
combined efforts of telescopes from around the world.

"This is a way that we hope can get the same sorts of observations: by harnessing the power of the masses from various amateurs," says Matthew Knight, an astronomer at the University of Maryland.

By observing the gas and dust in the

Over the last few years, spacecraft like NASA's Deep Impact/EPOXI or ESA's Rosetta (of which NASA played a part) discovered that comets are more dynamic than anyone realized. The missions found that dust and gas burst from a comet's nucleus every few days or weeks—fleeting phenomena that would have gone unnoticed if it weren't for the constant and nearby observations.

But space missions are expensive, so for three upcoming cometary visits, researchers are instead recruiting the



An orbit diagram of comet 41P/Tuttle-Giacobini-Kresak on February 8, 2017—a day that falls during the comet's prime visibility window. The planets orbits are white curves and the comet's orbit is a blue curve. The brighter lines indicate the portion of the orbit that is above the ecliptic plane defined by Earth's orbital plane and the darker portions are below the ecliptic plane. This image was created with the Orbit Viewer applet, provided by the Osamu Ajiki (Astro.Arts) and modified by Ron Baalke (Solar System Dynamics group, JPL). <http://ssd.jpl.nasa.gov/sbdb.cgi?orb=1;sstr=41P>



Comets (continued)

coma (the comet's atmosphere of gas & dust), and tracking outbursts, amateurs will help professional researchers measure the properties of the comet's nucleus, such as its composition, rotation speed, and how well it holds together.

The observations may also help NASA scout out future destinations. The three targets are so-called Jupiter family comets, with relatively short periods just over five years—and orbits that are accessible to spacecraft. "The better understood a comet is," Knight says, "the better NASA can plan for a mission and figure out what the environment is going to be like, and what specifications the spacecraft will need to ensure that it will be successful."

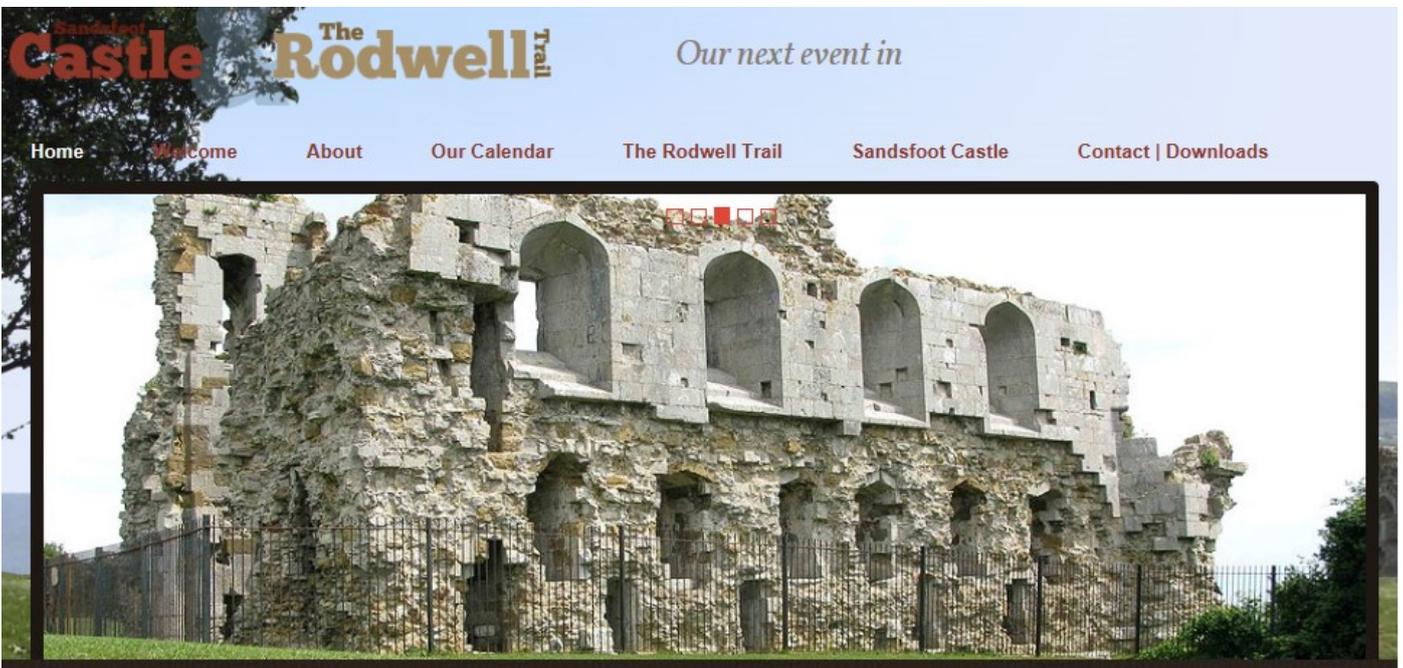
The first comet to arrive is 41P/Tuttle-Giacobini-Kresak, whose prime window runs from the end of January to the end of July. Comet 45P/Honda-Mrkos-Pajdusakova will be most visible between mid-February and mid-March. The third target, comet 46P/Wirtanen won't arrive until 2018.

Still, the opportunity to observe three relatively bright comets within roughly 18 months is rare. "We're talking 20 or more years since we've had anything remotely resembling this," Knight says. "Telescope technology and our knowledge of comets are just totally different now than the last time any of these were good for observing."

For more information about how to participate in the campaign, visit <http://www.psi.edu/41P45P46P>.



An Introduction to Astronomical Observing: Sandsfoot Castle



Weymouth Astronomy Club have been invited by the Sandsfoot Castle and Rodwell Trail Trust to participate in their next event on March 3rd at the Castle.

This free Introduction to Astronomical Observing evening is open to the public as well as members of the Trust and Weymouth Astronomy Club.

Besides short talks by WAC members there will also be an opportunity to observe the night sky, so bring your telescopes and binoculars.

The Castle team are providing drinks but there is no seating available, so either bring your own chair or be prepared to stand! The event will not take place if it is raining.

There is no charge to the public, this is a free event. It will be cancelled if wet.