

Tech Universe: Tuesday 8 November

By Miraz Jordan

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ANY OLD STEEL?: In London, England, a habitable sculpture called the ArcelorMittal Orbit has been completed. The tower is the architectural landmark of the 2012 London Olympic Games and is memorable at the least. If you can, imagine a tower with steel scaffolding still attached, but that scaffolding has been warped and bent and twisted beyond recognition, painted red and broken away. The new tower is twice the size of the Eiffel Tower, taller than the Statue of Liberty and will provide an observation platform as well as host other uses. It's just twisted. [Kuriositas](#).



The crew of researchers pose outside the set of windowless modules after completing a grueling 520-day simulation of a flight to Mars last week. Photo / AP

17 MONTHS FOR MARS: After 17 months the 6 crew of the Mars500 mission have returned from their trip to Mars — their simulated trip. Their mission for the European Space Agency was designed to study key key psychological and physiological effects of a long space mission in close quarters and isolation. The crew spent their 'trip to Mars' isolated in a 4 hermetically sealed interconnected habitat modules in a Moscow building. Sounds like all the hardship and none of the fun.

[European Space Agency](#).

[Video of the inside of the 'spacecraft':](#)

32 SPEED: The CORDON multi-target photo radar system from Peak Gain Systems can track and identify up to 32 different vehicles across four lanes of traffic at once. It takes a shot of the license plate, records the speed and collects two different high resolution views of each vehicle — wide angle and close up. It also handles Infrared for night time and GPS data. There's no hiding from speeding tickets. [Peak Gain Systems](#).

GO FOR THE LIGHT: The way Earth's lit up at night aliens shouldn't have any trouble finding us if they're looking. But how about the other way round?

Could we find signs of advanced civilisations on exoplanets by looking for signs of artificial light? The spectra of artificial lights on distant objects would remain constant while light reflected from a star would vary. Scientists from Harvard and Princeton Universities in the US think it's an approach that could work. The biggest problem just now is how faint the light would be.

Unless maybe advanced aliens wouldn't waste energy polluting the skies with superfluous light. [Technology Review](#).

ROAD CHARGERS: One problem with electric vehicles is the need to plug them in or park them on a special charging mat. Folks without a garage, such as many Wellingtonians, are just out of luck. One option car makers are exploring is dynamic wireless charging — as you drive along the road embedded chargers send power to a receiver underneath the car. Of course, current batteries can't pick up a charge quickly enough, roads would need to be modified and someone somewhere will need to figure out the money.

Cars could use supercapacitors to store energy rather than batteries though as they work well for fast, frequent charging. All very interesting, but hardly likely to happen any time soon. [Scientific American](#).

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