

# Best of Last Week – Grape fireballs in microwave ovens, Japanese probe lands on asteroid and impact of salt on allergies

February 25 2019, by Bob Yirka

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It was a good week for physics as a team at Tel Aviv University unveiled [new imaging technology that captures the movement of quantum](#)

[particles with unprecedented resolution](#)—it allows for the exploration of the generation and propagation of excitons in 2-D materials with unprecedented resolution.

A team with members from McMaster, Concordia and Trent Universities explained [why fireballs erupt from grapes in a microwave oven](#)—it has to do with hotspots that lead to the formation of plasma. And [the world's finest gold specimen was probed with Los Alamos neutrons](#) at the laboratory's neutron science center to learn more about its structure and formation process. Also, a team at MIT announced that they had [calculated a proton's pressure distribution for the first time](#)—they found that the particle contained a highly pressurized core that was generating greater pressures than those found inside a neutron star. And a team with members from Rutgers University and the University of Florida discovered what they described as [exotic spiraling electrons](#) that spin like planets.

In other news, solar technology company Insolight announced that their [new residential solar panels delivered record-breaking efficiency](#)—a 29 percent yield. Also, the Japan Aerospace Exploration Agency announced that its probe [Hayabusa2 landed on a distant asteroid](#)—the probe was launched in 2014, cost 30 billion yen and landed successfully on the Ryugu asteroid which is 300 million kilometers from Earth. And a team at the South Australian Health & Medical Research Institute conducted a study that showed [why high-protein diets are unhealthy](#)—they speed up [protein synthesis](#), which produces more errors, resulting in a shorter lifespan. Also, NASA officials announced that [the New Horizons spacecraft returned its sharpest views yet of Ultima Thule](#)—an object in the Kuiper Belt.

And finally, if you suffer from certain allergies, you might be interested in the results of a study conducted by a team at the Technical University of Munich—they found that [salt could be a key factor in allergic](#)

[immune reactions](#). They found its presence led to the formation of Th2 cells which are known to play a role in allergic conditions.

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