

Water running uphill a cooling idea

May 1 2006

A University of Oregon researcher has discovered a way to make water run uphill.

In a phenomenon known as the "Leidenfrost effect," water droplets can perform a dance in which they glide in random directions on a cushion of vapor that forms between the droplets and a hot surface, the American Institute of Physics reported.

A U.S.-Australian collaboration led by Heiner Linke of the University of Oregon found that the droplets can be steered in a selected direction when they are placed on a sawtooth-shaped surface.

The study, published in the Physical Review of Letters, said heating the surface to temperatures above the boiling point of water creates a cushion of vapor on which the droplet floats. The jagged surface appears to redirect the flow of vapor, creating a force that moves the droplet in a preferred direction.

Researchers say they might be able to use this phenomenon to cool off computer processors without adding any additional power.

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Citation: Water running uphill a cooling idea (2006, May 1) retrieved 20 April 2024 from <https://phys.org/news/2006-05-uphill-cooling-idea.html>

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