Three-dimensional representation of the emission of electrons from a neon atom upon absorption of a photon from an attosecond extreme ultraviolet pulse. The orange surface plot represents the resulting electron energy distribution, which, when probed by an ultrashort light wave (yellow line), reveals an unexpected time delay between the emission of electrons from different atomic orbitals. See page 1658.

Image: Christian Hackenberger/Ludwig-Maximilians-Universität, Munich, Germany
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J. F. Cahill Jr. et al.
Plant root growth is modified in the presence of within-species competition and uneven local resource distributions.

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M. Schulze et al.
Ultrafast metrology reveals a 20-attosecond delay between photoemission from different electronic orbitals in neon atoms.
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D. Huh et al.
Endothelial and epithelial cells grown in a microfluidics apparatus mimic the alveolar-capillary interface of the lung.

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Nanotube vibrations are visualized in three dimensions by varying the incident angle of an ultrashort electron probe burst.

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L. Yvan-Charvet et al.
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1700  A Generalization of Hamilton’s Rule for the Evolution of Microbial Cooperation
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A rule for the evolution of cooperation in microbes shows how bacteria resist cheaters.

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Immunoglobulin responses against nonpathogenic bacteria in the gut are specific for the resident microbial flora.
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1709  Transition to Addiction Is Associated with a Persistent Impairment in Synaptic Plasticity
F. Kasanetz et al.
Loss of glutamate receptor–dependent synaptic plasticity in the brain is associated with the transition to cocaine addiction.

1712  Incidental Haptic Sensations Influence Social Judgments and Decisions
J. M. Ackerman et al.
A seat-of-the-pants impression (tactile sensation influencing decisions) is a reality and not just a metaphor.