

PHYSICS TODAY

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ULTRADILUTE QUANTUM DROPLETS

The physics of
CRISPR-Cas9

Liquid-helium
shortages

How Einstein
became a celebrity

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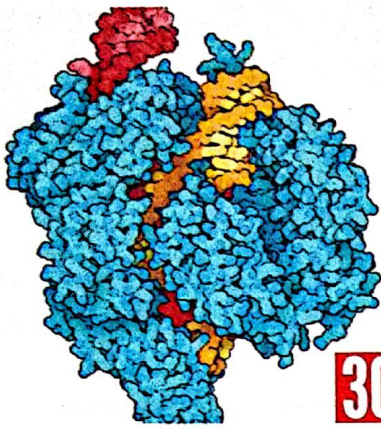
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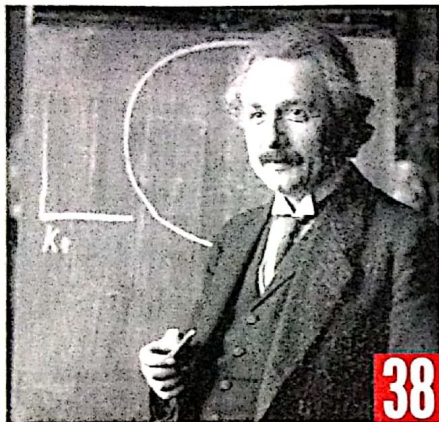
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Igor Ferrier-Barbut

A new class of quantum mechanical liquids is stabilized by an elegant mechanism that allows them to exist despite being orders of magnitude thinner than air.



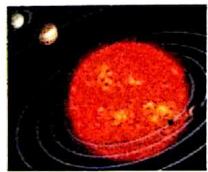
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ON THE COVER: In 2016, researchers at the University of Stuttgart in Germany created ultradilute quantum droplets of dysprosium atoms. The red and blue scattered light surrounding their optical table, shown here, comes from the lasers used to cool the atoms. On page 46, Igor Ferrier-Barbut explains the mean-field energy correction that led to the droplets' prediction and describes their subsequent realizations. (Photo courtesy of Wolfram Scheible.)

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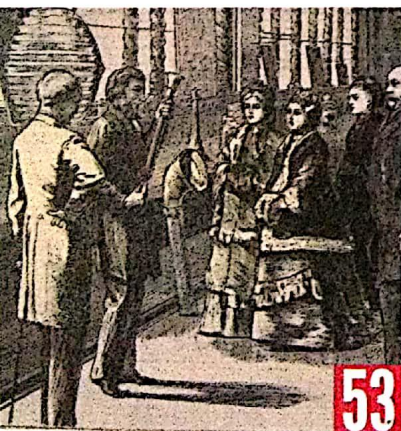
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