**COVER IMAGE**

The evidence for a time-reversal symmetry-breaking phase in the high-temperature cuprate superconductors has been contradictory. But these observations are consistent with a theory predicting fractional vortices that form 'necklaces' like the one pictured here.
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IMAGE: MIKAEL HÅKANSSON

COVER DESIGN: ALLEN BEATTIE

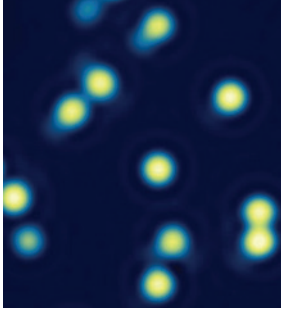
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Massless Weyl fermions discovered
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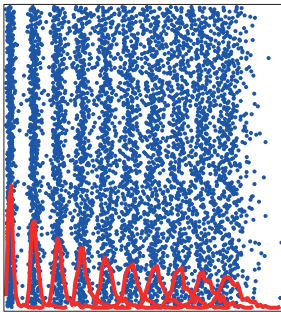
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Imaging individual atoms in an optical lattice with single-site resolution has so far only been possible for bosonic species, but thanks to electromagnetically-induced-transparency cooling fermionic species can now also be imaged.
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Cells rely on coherent oscillatory processes, despite being subject to large fluctuations from their environment. Simple motifs found in all oscillatory systems are studied to determine the thermodynamic cost of maintaining this coherence.
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