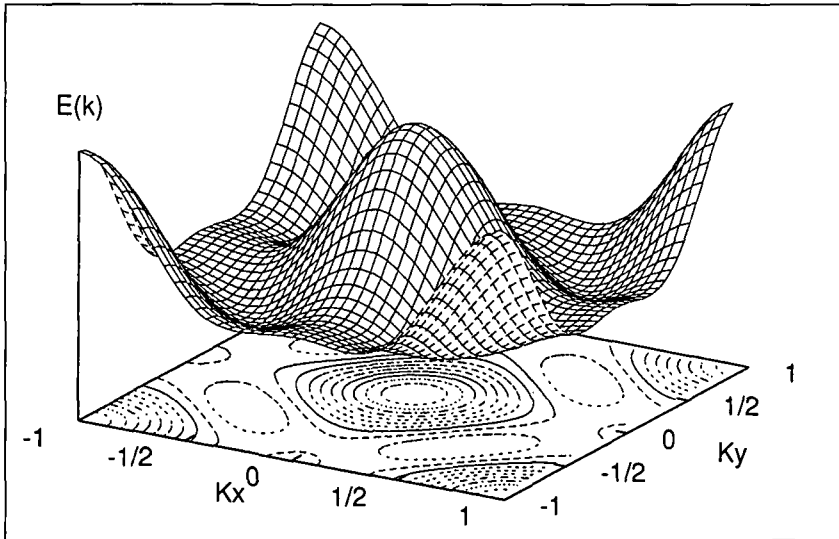


Figures appearing in *EDITOR'S CHOICE* are those arising from materials research which strike the editor's fancy as being aesthetically appealing and eye-catching. No further criteria are applied and none should be assumed. When taken out of context, such figures often evoke images beyond and unrelated to the original meaning. Submissions of candidate figures are welcome and should include a complete source citation, a photocopy of the report in which it appears (or will appear), and a reproduction-quality original drawing or photograph of the figure in question.



"Graceful" is the word that may best describe one's first impression of the wavy sheet that floats above the k_x - k_y plane in this month's *EDITOR'S CHOICE*. Something in its lines gives the feeling of motion. It is flowing and flapping in a breeze as a banner would flying from its $E(k)$ stanchion. Or perhaps it is simply a tablecloth fluttering into place in reciprocal space. Our favorite interpretation, however, pictures a sea creature undulating its way off a sandy bottom that ripples in response. Motion is indeed involved, but it is the motion of a positively charged carrier (a hole) through an antiferromagnetic background lattice. The crosshatched sheet actually represents the shape of the energy band as experienced by a single hole while interacting with spin waves in, for example, a high-temperature superconductor, as calculated in the so-called t - J model. Tao Li and Zi-Zhao Gan (*J. Phys. Condens. Matter* **10** [1998] p. 8007) note that their calculation of this behavior is fully analytical and covers the entire range of hole-spin-wave interaction strength. The precise (k_x, k_y) locations of band minima and how they adjust to changing interaction strength remain controversial aspects of the theory, but there is no argument over how elegant and delicate is the shape the band manifests.

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