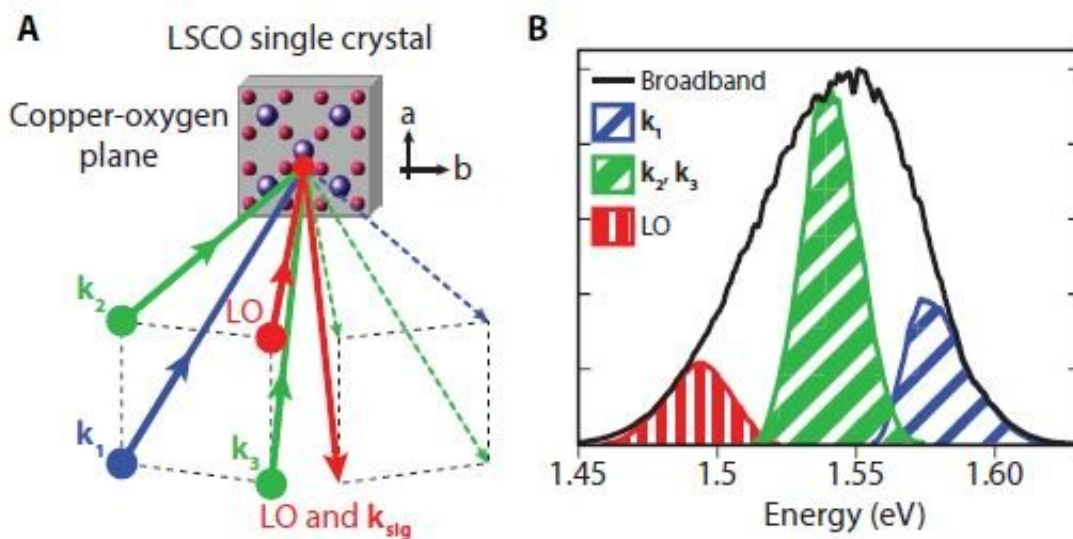


Ultrafast probing reveals intricate dynamics of quantum coherence

February 28 2020



Three excitation pulses with wave vectors k_1 , k_2 , and k_3 form three corners of a box with 4th pulse (local oscillation; LO) on the fourth corner. Credit: FLEET

Ultrafast, multidimensional spectroscopy unlocks macroscopic-scale effects of quantum electronic correlations.

Researchers at FLEET research center found that low-energy and high energy states are correlated in a layered, superconducting material LSCO ([lanthanum](#), [strontium](#), [copper](#), oxygen).

Exciting the material with an ultrafast (

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