Quantum mechanics may explain how humans smell

The process of smell via electron tunneling: (a), an electron in the nasal receptor finds its way to the donor component of the receptor; (b) and (c), a scent molecule’s vibrational frequency enables the electron to tunnel to a different energy state; (d) electron travels to the acceptor unit and molecule leaves. Credit: Marshall Stoneham, et al.

Scientists from the London Centre for Nanotechnology (LCN) at University College London have newly analyzed an intriguing 10-year-old theory of smell, finding that the idea may make more sense than once thought.