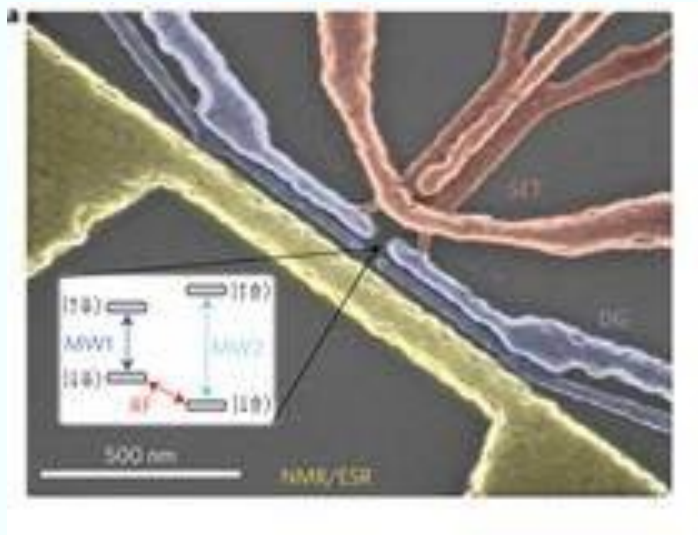




Bell's inequality violation with spins in silicon

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Nature Nanotechnology 11, 242-246 (2016)



A violation of Bell's inequality, which is a direct proof of entanglement, can be observed in the solid state using the electron and nuclear spins of a single phosphorus atom in silicon.

Coloured scanning electron microscope image of a device (the gates in red make up the single electron transistor [SET], the donor gates in blue control the donor potential; the gate in yellow is a broadband antenna).

LINK TO FULL PAPER (SUBSCRIBERS ONLY):

<http://www.nature.com/nnano/journal/v11/n3/full/nnano.2015.262.html>