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# 【129】Evidence for even parity unconventional superconductivity in Sr2RuO4

*Wednesday, 1 September 2021 16:00 (15 minutes)*

The idea that unconventional superconductivity (SC) in Sr<sub>2</sub>RuO<sub>4</sub> is a solid-state analogue to superfluid <sup>3</sup>He-A has been recently overturned. Here we use <sup>17</sup>O NMR spectroscopy to probe the SC state in Sr<sub>2</sub>RuO<sub>4</sub> in the limit T⟶0 down to B/B<sub>c2</sub>< 0.2. While the NMR Knight shift K includes contributions of both field-induced quasiparticles (QP) and a possible spin polarization of the condensate, the specific heat C/T includes only the QP term. By comparing the field dependences of K and C/T, we establish an upper bound for the condensate response of < 10% of the normal-state susceptibility, which is sufficient to exclude odd-parity candidates [1].

[1] Proc. Natl. Acad. Sci. (2021); arXiv:2007.13730

**Primary authors:** Prof. PUSTOGOW, Andrej (Institute of Solid State Physics, TU Wien, 1040 Vienna, Austria); CHRONISTER, Aaron (Department of Physics & Astronomy, University of California, Los Angeles, CA 90095, USA); KIKUGAWA, Naoki (National Institute for Materials Science, Tsukuba 305-0003, Japan); SOKOLOV, Dmitry A. (Max Planck Institute for Chemical Physics of Solids, Dresden 01187, Germany); JERZEMBECK, Fabian (Max Planck Institute for Chemical Physics of Solids, Dresden 01187, Germany); HICKS, Clifford W. (Max Planck Institute for Chemical Physics of Solids, Dresden 01187, Germany); MACKENZIE, Andrew P. (Max Planck Institute for Chemical Physics of Solids, Dresden 01187, Germany); BAUER, Eric D. (Los Alamos National Laboratory, Los Alamos, NM 87545, USA); BROWN, Stuart E. (Department of Physics & Astronomy, University of California, Los Angeles, CA 90095, USA)

**Presenter:** Prof. PUSTOGOW, Andrej (Institute of Solid State Physics, TU Wien, 1040 Vienna, Austria)

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