prove this by the fact that UH_3 has a higher Curie temperature[15] and a higher magnetization[16] than UD_3. The zero point motion is larger in UH_3 than in UD_3 and this results in an additional lattice expansion. Going back to Th_4H_{15} we expect a small negative isotope effect in comparison to Th_4D_{15}. Unfortunately this cannot be detected because of difficulties in identically preparing the deuteride and hydride.

We believe our picture to be only a very rough one. No details are known, e.g. concerning the portion of hydrogen electrons filling the thorium *f*-band and how this mechanism could be influenced by pressure.

In any case, additional measurements, especially of the position of the *f*-band relative to the Fermi level and of the electronic specific heat of Th_4H_{15}, would help to further clarify the situation.

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Es wird über Messungen der Übergangstemperatur zur Supraleitung unter hydrostatischem Druck bis 28 kbar berichtet. Die lineare Anfangssteigung beträgt +42 mK/kbar.