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Muon spin resonance study on UCu_{1.5}Sn₂ SAMI EL-KHATIB, New Mexico State University & LANSCE-LC, Los Alamos National Laboratory, G. MICHAEL KALVIUS, Physics Department, Technical University Munich, D.R. NOAKES, Chemistry and Physics Dept., Virginia State University, E.J. ANSALDO, University of Saskatchewan, Canada, C.E. STRONACH, Chemistry and Physics Dept., Virginia State University, E. BRUCK, Van der Waals-Zeeman Institute, University of Amsterdam, A. LLOBET, LANSCE-LC, Los Alamos National Laboratory, H. NAKOTTE, New Mexico State University — We report on muon spin relaxation measurements results on UCu_{1.5}Sn₂, which crystallizes in the CaBe₂Ge₂-type struc-Our analysis is consistent with collinear antiferromagnetic order with the transition temperature at 108±1K, which is in agreement with previous reports. The Brillouin-like behavior of the temperature dependence of magnetic order indicates localized 5f moments in this compound. Noticeable distortion in the magnetic structure occurring in the long-range order regime. The transition from paramagnetic region to the long-range ordered region has been explained by a model, which adopts the fast and slow relaxation rates.

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