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RDDS lifetime measurements of yrast states in ^{186}Hg

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In light, even-mass Hg isotopes, a weakly deformed oblate ground state band is found to coexist with a more deformed prolate band. To investigate the nuclear structure in more detail a recoil-distance Dopplershift (RDDS) experiment has been performed to determine absolute transition strengths in ^{186}Hg . These transition strengths provide information on the level mixing amplitudes of the two involved collective excitations. The experiment was carried out using the GAMMASPHERE HPGe-Array at the Argonne National Laboratory and the Cologne coincidence Plunger, equipped with a Ta-backed ^{150}Sm target and a gold stopper foil. The beam was ^{40}Ar at 184 MeV. We will present first results of the experiment. Supported by DFG, DE 1516/1-1

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