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【341】Positronium 1S-2S and 2S-2P precision spectroscopy

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Positronium being a purely leptonic atom provides an ideal test-bench of bound-state QED. Because of its simplicity, any deviation from calculations could hint to new physics beyond the standard model. A recent experiment exhibited a 4.2σ discrepancy with QED in one of the 2S-2P fine structure transitions, deserving further investigation. This talk will present the ongoing experimental progresses made in the microwave 2S-2P and laser 1S-2S spectroscopy with the help of a pulsed slow positron beam at ETH.

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