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WEAK QUASISTABILITY AND RAJCHMAN MEASURES

Dedicated to the memory Renée Good (1988–2026) and Alex Pretti (1988–2026)

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Abstract. It is shown that weak quasistability does not imply power boundedness, but coercive power unbounded operators cannot be weakly quasistable. Although a finite measure over the unit disc is a Rajchman measure if and only if the position operator is weakly stable, it is shown that the position operator is weakly quasistable for every finite continuous measure over the unit disc. Corollaries linking Rajchman measures with weak stability and weak quasistability follow the above results.

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