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**Stability of unconditional Schauder decompositions in Hilbert spaces.** (Ukrainian. English summary) [Zbl 1324.47023](#)

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Summary: We obtain the stability theorem for unconditional Schauder decompositions in Hilbert spaces. This result is a generalization of the classical Kato theorem on similarity for sequences of projections in Hilbert spaces to the case of unconditional Schauder decomposition. Also, we sharpen one theorem of *V. N. Viziteĭ* [On the stability of bases of subspaces in a Banach space (in Russian), Stud. Algebra Math. Anal., Moldov. Acad. Sci., 32–44 (1965; MR0205036)] on the stability of Schauder decompositions in the case of unconditional Schauder decompositions.

**MSC:**

- [47A46](#) Chains (nests) of projections or of invariant subspaces, integrals along chains, etc.
- [46B15](#) Summability and bases; functional analytic aspects of frames in Banach and Hilbert spaces
- [47B40](#) Spectral operators, decomposable operators, well-bounded operators, etc.

**Keywords:**

[unconditional Schauder decomposition](#); [projection](#); [isomorphism](#)