

MR2371257 (2009b:17006) [17A32](#)**Patsourakos, Alexandros** ([GR-HAFA](#))**On nilpotent properties of Leibniz algebras. (English summary)***Comm. Algebra* **35** (2007), *no.* [12](#), 3828–3834.

Leibniz algebras are a generalized version of Lie algebras, without the antisymmetry property. They were introduced by J.-L. Loday in 1993 [*Enseign. Math.* (2) **39** (1993), no. 3-4, 269–293; [MR1252069](#)] and they turned out to be useful both in mathematics and physics. The Leibniz algebra bimodule was defined by Loday and T. Pirashvili [*J. Algebra* **181** (1996), no. 2, 414–425; [MR1383474](#)].

In this paper, the main result is a generalization for Leibniz algebras of the fact that if a finite-dimensional Lie algebra acts on a vector space by nilpotent endomorphisms, then these have at least one common eigenvector corresponding to their unique eigenvalue zero. As a consequence, the Engel theorem for finite-dimensional Lie algebras about nilpotency follows.

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References

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Note: This list reflects references listed in the original paper as accurately as possible with no attempt to correct errors.