σ-Maps on triangular algebras

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Triangular algebras were introduced by Chase [1] in the early 1960s. He ended up with these structures in the course of his study of the asymmetric behavior of semi-hereditary rings. Since their introduction, triangular algebras have played an important role in the development of ring theory. In the middle/late 1990s, several authors undertook the study of derivations and related maps over some families of triangular algebras; see [3, 4, 5, 6] and references therein. See [2] for linear maps of abstract triangular algebras.

Here, we will focus our attention on σ-biderivations and σ-commuting maps of triangular algebras (σ is an automorphism of the algebra). We will introduce and describe a new class of automorphisms of triangular algebras, and provide many classes of triangular algebras whose automorphisms can be determined.

References

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