

Название публикации:

Formalization of System Links: Different Approaches. Duality in Smart Systems Theory

Авторы:

Serdyukova, N [1] ; Serdyukov, V [2,3]

[1] Plekhanov Russian Univ Econ, Acad Dept Finance & Prices, Moscow, Russia

[2] Bauman Moscow State Tech Univ, Dept Appl Math, Moscow, Russia

[3] Russian Acad Educ, Inst Educ Management, Moscow, Russia

Наименование журнала:

ALGEBRAIC FORMALIZATION OF SMART SYSTEMS: THEORY AND PRACTICE

Авторы книги: Serdyukova, N (Serdyukova, N); Serdyukov, V (Serdyukov, V)

Серия книг: Smart Innovation Systems and Technologies

Том: 91 Стр.: 79-96

DOI: 10.1007/978-3-319-77051-2_5

Опубликовано: 2018

Тип документа: Article; Book Chapter

Аннотация:

In this chapter we consider the following main questions: different approaches to the definition of duality in Smart Systems Theory, measurement of the system's links strength, the group of links on the Cayley Graph of the system, the concept of efficiency and its formalization, the concept of P-efficiency of a system, P-subgroups of effective links of a system. In addition to Chap. 4 in this chapter we shall continue to study the links of the system and define another group of system's links as a group defined on the Cayley graph of the group of factors that determine the system. Then we proceed to study the subgroups of effective connections of the system. We shall also introduce the notion of a common efficiency problem with risks. The next question that we shall consider in this chapter is the use of duality in systems theory. We shall give a brief survey of some of the methods that are useful to investigate the duality.

Ключевые слова:

Duality in smart systems theory; P-efficiency of a system; Group of system's links