VARIATIONS ON THE WADGE REDUCIBILITY

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The Wadge reducibility in the Baire and Cantor spaces is very important in descriptive set theory. We consider the Wadge reducibility in some other topological spaces, in particular, in the φ -spaces which are topological counterparts of the algebraic directed-complete partial orderings. It turns out that the Wadge reducibility behaves worse in most spaces than in the classical case but there exist interesting examples of spaces with a better behavior as well.

Key words and phrases: Wadge reducibility, φ -space, directed-complete partial ordering, retract, Borel set, difference hierarchy.

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Translated into English:

Siberian Advances in Mathematics, V. 15, N 3, 44–80 (2005).

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