

THE IDEAL OF COMPACT OPERATORS IN REAL FACTORS OF TYPES I AND II

A. A. Rakhimov, A. A. Katz, and R. Dadakhodjaev

In the article we study the ideal of relatively compact operators in a real von Neumann factor. We prove a real analog of the Calkin theorem on the uniform closure and uniqueness of the ideal of relatively compact operators. In addition, we show that, unlike complex factors, in a real semifinite factor, up to isomorphism, there exist, in the discrete case, three, and, in the continuous case, two nonzero uniformly closed two-sided real ideals.

Key words and phrases: two-sided ideal, ideal of operators, relatively compact operator, semifinite real factor.

Rakhimov Abdugafur Abdumadzhidovich

Karadeniz Technical University,
61080 Trabzon, Turkey;
National University of Uzbekistan,
700095 Tashkent, Uzbekistan.
E-mail: rakhimov@ktu.edu.tr;
aratex@uwed.freenet.uz;
rakhimov2002@yahoo.com

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Kats Aleksandr A.

Department of Mathematics and Computer Science,
St. John's University,
10301 Staten Island, 10301 NY, USA.
E-mail: katz@stjohns.edu

Rashitkhon Dadakhodzhaev

Institute of Mathematics Academy of Sciences,
700143 Tashkent, Uzbekistan.
E-mail: root@im.tashkent.su

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