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The Open-mapping and Closed-graph Theorems in Topological Vector Spaces

By TAQDIR HUSAIN, *Southern Illinois University*. The author describes the progress made in extending two of the deepest results of Functional Analysis, "the open-mapping and closed-graph theorems." The opening chapters deal with elementary concepts of topological and vector spaces. The work then goes on to describe recent extensions and related ideas, such as B -completeness and the open-mapping theorem, the ew^* -topology and various notions of completeness, the theory of S -spaces, and locally convex spaces with B -property.

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Homographies, Quaternions and Rotations

By PATRICK DUVAL, *University of London*. Bringing together the theories of one-dimensional homographies, of unitary matrices of order 2, of quaternions, of rotations in three and four dimensions, and of regular polyhedra and polytopes, this monograph clarifies the complex relationships and correspondences between these different disciplines. Most of the material has been collected from widely scattered papers, covering writers of different periods and nationalities. Much of the material is not yet in any textbook, and a great deal can properly be called classical. However, there are more modern links with some three-dimensional topological spaces, with the topology of singular points on an algebraic surface, and with involutions in the complex projective plane. 30 text figures.

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