

ABOUT ONE GENERALIZED CONCEPT OF A RELATIVE ROTATION

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In Y.G. Borisovich's works a topological invariant was introduced and studied. It is a relative topological degree (a relative rotation) of completely continuous vector fields. This concept is widely used during construction of topological degree of condensing and fundamentally restrictible vector fields, in the theory of positive operators and in other sections of modern mathematics. In the current paper a new approach to construction of relative degree of completely continuous vector fields is proposed. This approach includes construction of Y.G. Borisovich as a particular case and develops ideas, which were proposed in the monograph by M.A. Krasnoselski and P.P. Zabreyko.