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Annotation to the diploma work
«Fixed points of nonlinear
integral operators»

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Diploma work contains:

- 28 pages,
- 3 illustrations,
- 8 used sources.

Keywords: : fixed poin, Urysohn equation, the space of continuous functions, Lebesgue space, existence fixed point, completely continuous operator, fixed point property, Kantarovich fixed point property, Schauder fixed point property.

The diploma thesis deals with the problem of finding a solution for non-linear Uryson operator. The fundamental theorem for finding solutions are the Schauder, Banach, Kantorovich theorem of the existence of a fixed point for the operator. There are also many modified theory, for example, Darbo, Sadovsky, Agadzhami. The aim of the thesis is an application of the principles of a fixed point to the integral equations of Uryson. To achieve this purpose the theorem of the complete continuity of the operator, Lipschitz, compact. Thesis is both methodological and applied character. The results can be applied in practice.