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Martinez, Jean-Philippe (D-AACH-TPP)

★The Fock-Infeld dispute: an illustration of the renaissance of general relativity in the Soviet Union.

The renaissance of general relativity in context, 113–139, Einstein Stud., 16, Birkhäuser/Springer, Cham, [2020],

The author examines the socio-political history of Vladimir Fock's eccentric interpretation of Einstein's general theory of relativity, focusing on an exchange with Einstein's former collaborator Leopold Infeld in the early 1950s concerning their rival approaches to the problem of motion. In line with earlier appreciations by Loren Graham [Science, philosophy, and human behavior in the Soviet Union, Columbia Univ. Press, New York, 1987] and Gennady Gorelik [in The attraction of gravitation: new studies in the history of general relativity (Johnstown, PA, 1991), 308–331, Einstein Stud., 5, Birkhäuser Boston, Boston, MA, 1993; MR1735386], Martinez attributes Fock's success in defending general relativity from philosophically inclined attacks from Soviet Marxists to his creative alignment of Einstein's theory with dialectical materialism. Upon the death of Stalin, the Soviet Marxist philosophers lost their political sway, leaving Fock—and a few elements of his personal reading of general relativity—in a more prominent position among relativists in the Soviet Union.

{For the collection containing this paper see MR4305117}

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