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Evgeny I Gordon* (yigordon@eiu.edu), Department of Math & CS, Eastern Illinois University, 600 Lincoln Ave, Charleston, IL. *L.S. Pontrjagin's letters to I.I. Gordon*. Preliminary report.

We present the letters of the eminent Russian mathematician L.S. Pontrjagin to the topologist I.I. Gordon. Pontrjagin was the advisor for Gordon's PhD thesis in 1933-1935. In this thesis the ring of cohomologies was introduced independently of J.W. Alexander and A.N. Kolmogorov and a totally different approach was used. The 159 letters, which are already published in Russian, cover the period from 1937 to 1969. They touch on many interesting episodes of the history of Soviet Mathematics, including the period of World War II, the influence of the iron curtain on contacts between Soviet and West mathematicians after it, relations among the leading mathematicians N.N. Luzin, A.N. Kolmogorov and P.S. Alexandrov and many others. The letters of 1937 - 1938 contain a list of important problems in topology of that time from the point of view of Pontrjagin. An interesting discussion of the homotopic classification of continuous maps is contained in the letters of 1945-1951. The history of Pontrjagin's transition from topology to dynamical system under the influence of the eminent physicist A.A. Andronov and the work of Pontrjagin's group on the Maximum Principle are also discussed in the letters. (Received August 31, 2007)