

# The "lost" first international conference on nonlinear science

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In a famous article entitled *The nonlinear theory of electric oscillations* published in 1934 in the Proceedings of the Institute of Radio Engineers Balthazar Van der Pol ended his introduction by this sentence: "... a special international conference dedicated solely to the problems arising in the nonlinear oscillation theory was recently held in Paris, on January 28-30, 1933". Celebrating the centenary of the birth of Papaleksi in 1981, the Russian Vladimir Vasil'evich Migulin told that during the first international Conference on Nonlinear Oscillations which took place in January 1933 in Paris, Nikolai Dimitrievich Papaleksi presented two papers on the studies being conducted in the USSR along this line. Twenty five years later, the Russian Academician Evghen L'vovich Feinberg, still celebrating Papaleksi wrote: "It is not surprising that, when the first international conference on nonlinear oscillations was convened in Paris in 1932 (among its participants were such pioneers in this field as B. Van der Pol, L. Brillouin, and others), it was Papaleksi who represented the Moscow school of Mandel'shtam and Papaleksi, their closest disciples and colleagues Andronov, A. A. Vitt, Khaikin, and others, reporting on its achievements". The problem is that, apart from these references, there was no trace of this conference: no announcement, no location (in Paris), no proceedings, no list of participants and no program. So, has it really happened? The aim of this article is to clarify this question. Thus, it will be shown that the first (lost) international conference on nonlinear do happened in Paris at the *Institut Henri Poincaré* under the presidency of Balthazar Van der Pol and Nikolai Dimitrievich Papaleksi and in presence of Alfred Liénard, Elie and Henri Cartan, Ernest Esclangon, Henri Abraham, Léon Brillouin, Philippe Le Corbeiller, Yves Rocard, Camille Gutton, ... Then, the importance of such a meeting on the emergence of Non-Linear Mechanics in France during this period as well as the full list of participants and the thematic of the discussions will be analyzed.