ABSTRACT

This publication is devoted to unique archival materials – Jarník's mathematical notebook, which he wrote during his studies at the University in Göttingen in the academic year 1927/1928 and which contains a record of the lecture course he attended given by Pavel Sergeevich Aleksandrov titled *Punktmengen and reelle Funktionen* [Point sets and real functions].

The first chapter of the present text gives a short description of Aleksandrov's life and scientific as well as pedagogical activities. His lecturing in Göttingen and collaboration with German mathematicians are the main topics of that chapter.

The second chapter is devoted to Jarník's life and work and mainly to his studies at Göttingen in the academic years 1923/1924, 1924/1925 and 1927/1928.

The third chapter briefly deals with the founding of the University in Göttingen and the development of mathematical studies and research there. The productive and inspiring atmosphere in the Göttingen mathematical center in the 1920's and 1930's is brought to life with the help of long passages chosen from the recollections of some outstanding mathematicians who lectured or studied there.

The fourth chapter provides a general account of Jarník's fourteen notebooks and a short description of his fifth notebook which contains Aleksandrov's lectures *Punktmengen and reelle Funktionen*.

The sixth and the seventh chapters are the heart of this publication. Firstly, Aleksandrov's lectures are rewritten from Jarník's manuscript and then detailed mathematical, historical and bibliographical comments follow.

Illustrations and copies from Jarník's notebook and some archival materials and documents can be found at the end of the book, followed by an index of names.