

## Abstracts

This volume, "Hoene-Wroński: Life, Mathematics, and Philosophy", contains papers prepared by participants of the session "A Tribute to Józef Hoene-Wroński", held at the Institute of Mathematics, Polish Academy of Sciences, Warsaw, January 12–13, 2007.

**P. Pragacz:** *The life and work of Józef Maria Hoene-Wroński*

We describe the Polish, French, and English periods of Hoene-Wroński's life. We discuss his basic achievements in algebra and analysis: solution of the factorization problem, interpolation of a function by continued fractions, and Wrońskians.

**R. Murawski:** *The philosophical system of Hoene-Wroński*

The philosophical system of Hoene-Wroński and his philosophy of history are presented. The reception of his ideas is also discussed.

**W. Więśław:** *Mathematics of Hoene-Wroński and of his time*

We present a short summary of mathematics in the time of Hoene-Wroński as well as some of his mathematical results. Hoene-Wroński's lifetime (1776–1853) almost coincides with that of Carl Friedrich Gauss (1777–1855). We point out some manuscripts of Hoene-Wroński in the Library of Kórnik (near Poznań) which deserve a further study. Finally, we present some reactions of his contemporaries to his research.

**T. Maszczyk:** *On the superiority of Hoene-Wroński's "Loi suprême" over the Bürmann–Lagrange formula*

Two solutions of the problem of local inverting of an analytic function are compared: the one provided by the Bürmann–Lagrange formula, and the one based on the universal expansion of Hoene-Wroński. In contrast to the common opinion, the Bürmann–Lagrange formula does not provide the simplest possible expression for the coefficients of the inverse series, while the formula of Hoene-Wroński does provide such an expression.

**P. Domański:** *Stefan Banach's paper on the "Highest Law" of Józef Hoene-Wroński*

We discuss the 1939 paper of Stefan Banach devoted to his version of "Loi suprême". We try to explain its content in the framework and in terms of modern functional analysis. We also show which ideas of modern functional analysis are already present in that paper.

**W. Wójcik:** *Józef Maria Hoene-Wroński as a prophet and reformer of mathematics*

I present some elements of Hoene-Wroński's knowledge system which was aimed at creating the unity of the whole human knowledge. I then turn my attention to the vital role of mathematics in his system and focus on the specific connections between mathematics, philosophy and mysticism. Moreover, I discuss Hoene-Wroński's division of mathematics and analyze algorithms underlying this division.

**W. Karkucińska and M. Marcinkowska:** *Hoene-Wroński's legacy in the Kórnik Library*

We describe the history of the legacy of Hoene-Wroński in the Kórnik Library of the Polish Academy of Sciences. We present several pictures of the Kórnik castle, as well as of people and objects from this legacy.