Life and work of Vojtěch Jarník

Pál Erdös My memories of V. Jarník

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MY MEMORIES OF V. JARNÍK

Paul Erdös

I knew of Jarník as a great mathematician since the early 1930's. However, I met him only at the meeting in Oslo 1936. In the spring of 1937 returning from England to Hungary I stopped in Prague for 2–3 days to visit Jarník. I also met the Loewner family in Prague, later I met the Loewners in Princeton, Syracuse and California. In 1967 my mother and I had a dinner with Loewner at the faculty club in Stanford, unfortunately Loewner "left" a few weeks later. Chung wrote "Loewner left, we will follow."

In our joint paper with $Jarník^1$ [1] we found a simple proof of a theorem of Chinčin (Khinchin) [2]:

Satz. Zu jedem Paar von positiven Zahlen γ, n gibt es ein $\delta = \delta(\gamma, n) > 0$ mit folgender Eigenschaft:

Sind r_1, r_2, \ldots, r_n, q ganze Zahlen mit

$$q > 0, (r_1, \dots, r_n, q) = 1$$

und besitzt die Kongruenz

$$\sum_{i=1}^{n} r_i x_i \equiv 0 \pmod{q}$$

keine Lösung mit

$$0 < \max_{1 \leqslant i \leqslant n} |x_i| \leqslant \gamma q^{1/n},$$

so besitzt die Kongruenz

$$\sum_{i=1}^{n} r_i x_i \equiv m \pmod{q}$$

¹ I remembered that we finished our paper when I was visiting Jarník in Prague in 1937 but this is contradicted to the fact that our paper was submitted Oct 1 1936.

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für jedes m keine Lösung mit

$$\max_{1 \leqslant i \leqslant n} |x_i| \leqslant \delta q^{1/n}.$$

As far as I remember neither I nor Jarník have ever returned to this topic again.

In 1949 after a short visit to Hungary I went to England and US via Prague and Jarník met me at the airport. This is the last time I saw him.

In 1937 we talked besides mathematics a great deal about politics. It just occurred to me that Mrs. Jarník did not at first realize that I am not on the side of Horthy. In 1949 I did not talk much about politics with Jarník—he originally, I think, was quite favourable to the leftist ideas but did not very much like the later development.

References

- [1] P. Erdös, V. Jarník: Eine Bemerkung über lineare Kongruenzen. Acta Arithmetica 2 (1937), 214–220.
- [2] A. Khintchine: Über die angenäherte Auflösung linearer Gleichungen in ganzen Zahlen. Rec. math. de la Soc. Math. de Moscow 32 (1924), 203–218; , Acta Arithmetica vol. 2.