

# Applications of Mathematics

---

Pavel Krejčí

Otto Vejvoda passed away

*Applications of Mathematics*, Vol. 54 (2009), No. 4, 377--378

Persistent URL: <http://dml.cz/dmlcz/140371>

## Terms of use:

© Institute of Mathematics AS CR, 2009

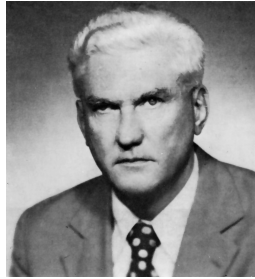
Institute of Mathematics of the Academy of Sciences of the Czech Republic provides access to digitized documents strictly for personal use. Each copy of any part of this document must contain these *Terms of use*.



This paper has been digitized, optimized for electronic delivery and stamped with digital signature within the project *DML-CZ: The Czech Digital Mathematics Library* <http://project.dml.cz>

## NEWS AND NOTICES

## OTTO VEJVODA PASSED AWAY



On April 13, 2009, a prominent Czech mathematician, Professor Otto Vejvoda, passed away in Prague. Born in Zábοřί nad Labem on June 4, 1922, he finished his secondary school in Prague in 1941. Czech universities were closed during the German occupation till 1945, and Otto Vejvoda was working as mathematics teacher during this time. He entered the Charles University in Prague in 1945 and graduated in Mathematics and Physics in 1949. His first mathematical interests were related to projective geometry, but very soon he turned to differential equations. His PhD Thesis from 1956 on stability of differential equations in the complex domain was supervised by V. Knichal at the Mathematical Institute of the Czechoslovak Academy of Sciences in Prague.

At the age of 40, he started losing his eyesight and eventually became completely blind a few years later. Despite this handicap, he did not give up mathematics and even switched to a new subject—partial differential equations. As Head of the Department of Evolution Differential Equations at the Mathematical Institute, he wrote together with his collaborators the book [1], which was to our knowledge the first systematic monograph on periodic solutions of partial differential equations in mathematical literature.

Otto Vejvoda was an excellent teacher and organizer. Under his supervision, thirteen graduate students (Z. Vorel, M. Jasný, J. Havlová, H. Petzeltová, V. Vítek, M. Tvrđý, V. Lovicar, M. Štědrý, J. Barták, L. Herrmann, I. Straškraba, P. Filip, P. Krejčí) completed their PhD degree. In the Mathematical Institute, he initiated a weekly seminar, which has gained high recognition among Prague mathematicians. He also founded in 1984 the regular Summer School on Evolution Equations “EVEQ” that since then has been taking place every four years. His yearly Autumn Schools on Partial Differential Equations in the 1980’s were very popular in the engineering community.

Young members of his department were fascinated by his method of work. Being blind, he was receiving the information only by listening. In seminars, it was amazing how he was able to follow and to make qualified comments on the lecture. For the speaker, it was an excellent training to use an accurate language and avoid sentences like “We estimate this term by this constant”—it was necessary to specify *which* term and *which* constant. In his internal sight, Otto Vejvoda saw the equations and manifested an incredible intuition in solving mathematical problems.

All Otto Vejvoda’s publications till 1981 are listed in note [2] dedicated to his 60th birthday. Below in [3]–[13], we amend this list by more recent items.

Otto Vejvoda retired officially in 1987, but he remained in active contact with his colleagues till the very end of his life. We shall miss his neverending optimism, inspiration, and encouragement.

*Pavel Krejčí*, Editor-in-Chief

#### References

- [1] *O. Vejvoda, L. Herrmann, V. Lovicar, M. Sova, I. Straškraba, M. Štědrý*: Partial Differential Equations: Time-Periodic Solutions. Martinus Nijhoff Publishers, The Hague, 1981.
- [2] *J. Kurzweil, V. Lovicar*: To the sixtieth anniversary of birthday of Professor Otto Vejvoda. Czechoslovak Math. J. *32(107)* (1982), 504–510.
- [3] *R. C. Brown, M. Tvrđý, O. Vejvoda*: Duality theory for linear  $n$ -th order integro-differential operators with domain in  $L_m^p$  determined by interface side conditions. Czechoslovak Math. J. *32(107)* (1982), 183–196.
- [4] *L. Herrmann, O. Vejvoda*: Periodic and quasi-periodic solutions of abstract differential equations. An. Ştiinţ. Univ. “Al. I. Cuza” Iaşi Sect. Ia Mat. (N.S.) *28* (1982), 103–108.
- [5] *M. Štědrý, O. Vejvoda*: Small time-periodic solutions of equations of magnetohydrodynamics as a singularly perturbed problem. Apl. Mat. *28* (1983), 344–356.
- [6] *O. Vejvoda, M. Štědrý*: Existence of classical periodic solutions of the wave equation. The relation of the number-theoretic character of the period and the geometric properties of solutions. Differential’nye Uravneniya *20* (1984), 1733–1739. (In Russian.)
- [7] *M. Tvrđý, O. Vejvoda*: Periodic solutions of weakly perturbed autonomous functional-differential equations. Ninth international conference on nonlinear oscillations, Vol. 2 (Kiev, 1981). “Naukova Dumka”, Kiev, 1984, pp. 375–379. (In Russian.)
- [8] *M. Štědrý, O. Vejvoda*: Equations of magnetohydrodynamics of compressible fluid: periodic solutions. Apl. Mat. *30* (1985), 77–91.
- [9] *M. Štědrý, O. Vejvoda*: Equations of magnetohydrodynamics: Periodic solutions. Čas. Pěstování Mat. *111* (1986), 177–184.
- [10] *J. Barták, O. Vejvoda*: Periodic solutions to linear partial differential equations of the first order. Czechoslovak Math. J. *41(116)* (1991), 185–202.
- [11] *J. Barták, L. Herrmann, V. Lovicar, O. Vejvoda*: Partial Differential Equations of Evolution. Ellis Horwood Series: Mathematics and its Applications. Ellis Horwood, New York, 1991.
- [12] *O. Vejvoda, P. Krejčí*: A note to a bifurcation result of H. Kielhöfer for the wave equation. Math. Bohem. *116* (1991), 245–247.
- [13] *E. Feireisl, L. Herrmann, O. Vejvoda*: A Landesman-Lazer type condition and the long time behaviour of floating plates. Acta Math. Inform. Univ. Ostrav. *2* (1994), 33–44.