

Generic singularities of implicit systems of first order differential equations on the plane

A.A. Davydov* · G. Ishikawa** · S. Izumiya*** · W.-Z. Sun†

Received: 12 December 2006 / Revised: 10 August 2007 / Accepted: 29 January 2008

Published online: 22 March 2008

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Communicated by: Kaoru Ono

Abstract. For the implicit systems of first order ordinary differential equations on the plane there is presented the complete local classification of generic singularities of family of its phase curves up to smooth orbital equivalence. Besides the well-known singularities of generic vector fields on the plane and the singularities described by a generic first order implicit differential equations, there exists only one generic singularity described by the implicit first order equation supplied by Whitney umbrella surface generically embedded to the space of directions on the plane.

Keywords and phrases: system folding, phase curve, Clairaut system

Mathematics Subject Classification (2000): 58K50 (primary), 58K45, 37G05, 37Jxx (secondary)

A.A. DAVYDOV

Department of Mathematics, Vladimir State University, Gorkii street 87, 600026 Vladimir, Russia
(e-mail: davydov@vpti.vladimir.ru)

G. ISHIKAWA

Department of Mathematics, Hokkaido University, Sapporo 060-0810, Japan
(e-mail: ishikawa@math.sci.hokudai.ac.jp)

S. IZUMIYA

Department of Mathematics, Hokkaido University, Sapporo 060-0810, Japan
(e-mail: izumiya@math.sci.hokudai.ac.jp)

W.-Z. SUN

School of Science, Changchun University of Science and Technology, Changchun 130022, China
(e-mail: wzsun@cust.edu.cn)

* Financial support from RFBR 00-01-00343 and Grant-in-Aid for Scientific Research, No. 10304003.

** Financial support from Grant-in-Aid for Scientific Research, No. 14340020.

*** Financial support from Grant-in-Aid for Scientific Research, No. 10304003.

† Financial support from Grant-in-Aid for Scientific Research, No. 14604003.