

Ahmad, S.; Ata-ur-Rahman; Khan, S. A.; Hadi, F.
Damped Kadomtsev-Petviashvili equation for weakly dissipative solitons in dense relativistic degenerate plasmas. (English) [Zbl 1382.35254](#)
Commun. Theor. Phys. 68, No. 6, 783-790 (2017).

MSC:

35Q53 KdV equations (Korteweg-de Vries equations)
35C08 Soliton solutions
82D10 Statistical mechanical studies of plasmas

Keywords:

dissipative solitons; damped Kadomtsev-Petviashvili equation

Full Text: [DOI](#)

References:

- [1] Haines M. G., LePell P. D., Coverdale C. A., Jones B., Deeney C. and Apruzese J. P. 2006 *Phys. Rev. Lett.* 96 075003
- [2] Chabrier G., Douchin F. and Potekhin A. Y. 2002 *J. Phys. Condens. Matter* 14 9133
- [3] Michel F. C. 1982 *Rev. Mod. Phys.* 54 1
- [4] Shapiro S. L. and Teukolsky S. A. 1983 *Black Holes, White Dwarfs, and Neutron Stars: The Physics of Compact Objects* (New York: John Wiley and Sons)
- [5] Gursky H. 1976 *Frontiers of Astrophysics* (London: Harvard University Press)
- [6] Kremp D., Bornath Th, Bonitz M. and Schlanges M. 1999 *Phys. Rev. E* 60 4725
- [7] Lindl J. 1995 *Phys. Plasmas* 2 3933
- [8] Hu S. X. and Keitel C. H. 1999 *Phys. Rev. Lett.* 83 4709
- [9] Leon P. T., Eleizer S., Piera M. and Val J M M 2008 *Current Trends in Inertial Fusion Research-Proceedings of the Fifth Symposium* ed E. Panarella and R. Raman (Ottawa, Canada: NRC Research Press)
- [10] Drake R. P. 2009 *Phys. Plasmas* 16 055501
- [11] Glenzer S. H. and Redmer R. 2009 *Rev. Mod. Phys.* 81 1625
- [12] Koester D. and Chanmugam G. 1990 *Rep. Prog. Phys.* 53 837
- [13] Shukla P. K. and Eliasson B. 2011 *Rev. Mod. Phys.* 83 885
- [14] Chandrasekhar S. 1939 *An Introduction to the Study of Stellar Structure* (Chicago: University of Chicago Press) · [Zbl 0022.19207](#)
- [15] Chandrasekhar S. 1935 *Mon. Not. R. Astron. Soc.* 170 405
- [16] Fontaine G. and Wesemae F. 2001 *Encyclopedia of Astronomy and Astrophysics* ed P. Murdin (New York: Nature)
- [17] Sivak H. D. 1985 *Physica A* 129 408
- [18] Khan S. A., Ayub K. and Ahmad A. 2012 *Phys. Plasmas* 19 102104
- [19] Kadomtsev B. B. and Petviashvili V. I. 1970 *Sov. Phys. Dokl.* 15 539
- [20] Das G. C. and Sen K. M. 1993 *Contrib. Plasma Phys.* 33 15
- [21] Duan W. S. 2002 *Chaos Solitons Fractals* 14 503
- [22] El-Labany S. K., Moslem W. M., El-Taibany W. F. and Mahmood M. 2004 *Phys. Scr.* 70 317
- [23] Rehman H., Khan S. A., Masood W. and Siddiq M. 2008 *Phys. Plasmas* 15 124501
- [24] Zeba I., Moslem W. M. and Shukla P. K. 2012 *Astrophys. J.* 750 72
- [25] Rahman A., Ali S., Moslem W. M. and Mushtaq A. 2013 *Phys. Plasmas* 20 072103
- [26] Karpman V. I. and Maslov E. M. 1977 *Sov. Phys. JETP* 46 281
- [27] Herman R. L. 1990 *J. Phys. A* 23 2327
- [28] Ghosh S. and Chakrabarti N. 2011 *Phys. Rev. E* 84 046601
- [29] Samsonov D., Ivlev A. V., Quinn R. A., Morfill G. and Zhdanov S. 2002 *Phys. Rev. Lett.* 88 095004

- [30] Haas F. and Bret A. 2012 Europhys. Lett.97 26001
- [31] Nahar L., Zobaer M. S., Roy N. and Mamun A. A. 2013 Phys. Plasmas20 022304
- [32] Washimi H. and Taniuti T. 1966 Phys. Rev. Lett.17 996
- [33] Davidson R. C. 1972 Methods in Nonlinear Plasma Theory (New York: Academic)
- [34] Belashov V Yu and Vladimirov S. V. 2005 Solitary Waves in Dispersive Complex Media (Berlin: Springer-Verlag) · [Zbl 1087.76002](#)
- [35] Newell A. C. 1985 Solitons in Mathematics and Physics (Philadelphia, Penn: SIAM) · [Zbl 0565.35003](#)
- [36] Popel S. I., Golub A. P., Losseva T. V., Ivlev A. V., Khrapak S. A. and Morfill G. 2003 Phys. Rev. E 67 056402

This reference list is based on information provided by the publisher or from digital mathematics libraries. Its items are heuristically matched to zbMATH identifiers and may contain data conversion errors. It attempts to reflect the references listed in the original paper as accurately as possible without claiming the completeness or perfect precision of the matching.