## L. Oukhtite, A. Mamouni, Mohammad Ashraf

Commutativity theorems for rings with differential identities on Jordan ideals

Comment.Math.Univ.Carolin. 54,4 (2013) 447 –457.

Abstract: In this paper we investigate commutativity of ring R with involution '\*' which admits a derivation satisfying certain algebraic identities on Jordan ideals of R. Some related results for prime rings are also discussed. Finally, we provide examples to show that various restrictions imposed in the hypotheses of our theorems are not superfluous.

Keywords: derivation; generalized derivation; \*-Jordan ideal AMS Subject Classification: 16W25, 16N60, 16U80

## References

- Awtar R., Lie and Jordan structure in prime rings with derivations, Proc. Amer. Math. Soc. 41 (1973), 67–74.
- Bell H.E., Daif M.N., On derivations and commutativity in prime rings, Acta Math. Hungar. 66 (1995), 337–343.
- [3] Daif M.N., Bell H.E., Remarks on derivations on semiprime rings, Internat. J. Math. Math. Sci. 15 (1992), 205–206.
- [4] Herstein I.N., Rings with Involution, Univ. Chicago Press, Chicago, 1976.
- [5] Herstein I.N., A note on derivations, Canad. Math. Bull. 21 (1978), 369–370.
- [6] Hongan M., A note on semiprime rings with derivation, Internat. J. Math. Math. Sci. 20 (1997), no. 2, 413–415.
- Mamouni A., Oukhtite L., Derivations satisfying certain algebraic identities on Jordan ideals, Arab. J. Math. 1 (2012), no. 3, 341–346.
- [8] Mamouni A., Oukhtite L., Generalized derivations centralizing on Jordan ideals of rings with involution, submitted.
- [9] Oukhtite L., On Jordan ideals and derivations in rings with involution, Comment. Math. Univ. Carolin. 51 (2010), no. 3, 389–395.
- [10] Oukhtite L., Posner's second theorem for Jordan ideals in rings with involution, Expo. Math. 29 (2011), 415–419.
- [11] Oukhtite L., Salhi S., On derivations in  $\sigma$ -prime rings, Int. J. Algebra 1 (2007), no. 5, 241–246.
- [12] Zaidi S.M.A., Ashraf A., Ali S., On Jordan ideals and left (θ, θ)-derivations in prime rings, Int. J. Math. Math. Sci. 2004, no. 37–40, 1957–1964.