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Compacta with algebraically closed function algebras

For a compact Hausdorff space X, $C(X)$ denotes the algebra consisting of all complex-valued continuous functions on X. We say that $C(X)$ is *algebraically closed* if each monic algebraic equation with $C(X)$-coefficients has a root in $C(X)$. We discuss the characterization problem of compacta X with algebraic closed $C(X)$.

References

[1] N. Brodskiy, J. Dydak, A. Karasev and K. Kawamura. Root closed function algebras on compacta of large dimensions, *Proc. Amer. Math. Soc.* 35 (2007), 587–596.

[2] K. Kawamura and T. Miura. On the root closedness of continuous function algebras, *preprint*.

[3] K. Kawamura, a paper in preparation.