

CORRESPONDENCES FOR COVERING POINTS

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Abstract. Harris and Knörr proved that there is a defect group preserving correspondence between the covering blocks of two Brauer correspondent blocks. A module theoretical version of this result exists and it is due to Alperin [1]. Here we prove that these two results still hold in a more general setting, that is the case of points on some G -algebras over a discrete valuation ring.

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Key words. Pointed group, defect pointed group, divisor, restriction and induction of divisors, Green correspondence.

REFERENCES

- [1] ALPERIN, J.L., *The Green correspondence and normal subgroups*, J. Algebra, **104** (1986), 74–77.
- [2] HARRIS, E. and KNÖRR, R., *Brauer correspondence for covering blocks of finite groups*, Comm. Algebra, **13** (1985), 1213–1218.
- [3] KNÖRR, R., *Blocks, vertices and normal subgroups*, Math. Z., **148** (1976), 53–60.
- [4] PUIG, L., *Blocks of Finite Groups. The Hyperfocal Subalgebra of a Block*, Springer-Verlag, Berlin, 2002.
- [5] THÉVENAZ, J., *G-Algebras and Modular Representation Theory*, Clarendon Press, Oxford, 1995.

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