

Partial group actions and partial Galois extensions

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The talk will be based on the paper [1]. Let (S, α) be a set with a partial action of a group G . We shall present some results on partial orbits and partial stabilizers. If (S, α) is a partial Galois extension, we also study the partial Galois extensions in (S, α) generated by central idempotents of S . Let \mathcal{M}_K denote the set of minimal elements of the Boolean ring generated by certain central idempotents of S associated to K . It is invariant under the partial action α restricted to K , denoted α_K . We will show how to construct partial Galois extensions in (S, α) via partial orbits in the α_K -invariant subset \mathcal{M}_K .

REFERENCES

1. J-M Kuo, G. Szeto, *Partial group actions and partial Galois extensions*, *Monatsh Math* **185** (2018), 287–306.