

(INVERSE) GALOIS THEORY OVER SKEW FIELDS

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The aim of this minicourse is to give an introduction to the inverse Galois theory for skew fields, a recent topic, that was initiated by Deschamps and Legrand in [DL20]. In the first part, I will present the Galois theory for skew fields due to Jacobson. For that, I will follow closely [Coh95]. The second part will be devoted to some recent research on the inverse Galois problem over skew fields. More precisely, I will present results in [DL20] and [Beh21].

REFERENCES

- [Beh21] Angelot Behajaina. Théorie inverse de Galois sur les corps des fractions rationnelles tordus. (French). *Journal of Pure and Applied Algebra.*, 224(106549), 2021.
- [Coh95] Paul Moritz Cohn. *Skew fields. Theory of general division rings.* Encyclopedia of Mathematics and its Applications, 57. Cambridge University Press, Cambridge, 1995. xvi+500 pp.
- [DL20] Bruno Deschamps and François Legrand. Le problème inverse de Galois sur les corps des fractions tordus à indéterminée centrale. (French). *Journal of Pure and Applied Algebra.*, 224(106240), 2020.