

THE M-STEP SOLVABLE MONO-ANABELIAN GEOMETRY OF NUMBER FIELDS (JOINT WORK WITH MOHAMED SAIDI)

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In this talk, we establish a group-theoretic algorithm, to reconstruct a number field (together with its maximal m -step solvable extension) from the maximal $(m + 6)$ -step solvable quotient of its absolute Galois group. Moreover, if K is an imaginary quadratic field or \mathbb{Q} , we establish a group-theoretic algorithm to reconstruct K from the maximal 3-step solvable quotient of its absolute Galois group.