

## SOME NEW EXAMPLES OF SIMPLE $p$ -LOCAL COMPACT GROUPS

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**Abstract:** In this paper we present new examples of simple  $p$ -local compact groups for all odd primes. We also develop the necessary tools to show saturation, simpleness, and the non-realizability as  $p$ -compact groups or compact Lie groups, which can be applied in a more general framework.

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**Key words:**  $p$ -compact groups, infinite fusion systems, centralizers, fusion subsystems.