

PRIME FUZZY IDEALS OVER NONCOMMUTATIVE RINGS

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ABSTRACT. In this paper we introduce prime fuzzy ideals over a noncommutative ring. This notion of primeness is equivalent to level cuts being crisp prime ideals. It also generalizes the one provided by Kumbhojkar and Bapat in 1993, which lacks this equivalence in a noncommutative setting. Semiprime fuzzy ideals over a noncommutative ring are also defined and characterized as intersection of primes. This allows us to introduce the fuzzy prime radical and contribute to establish the basis of a Fuzzy Noncommutative Ring Theory. This work is going to appear in [?].

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