

Commutative Ring Theory Days 2010

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ALGEBRAIC PROPERTIES OF STAR-IDEAL SEMIGROUPS

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Let R be an integral domain, $*$ a star operation on R and $\mathcal{F}_*^\bullet(R)$ the (multiplicative) semigroup of non-zero fractional $*$ -ideals of R . In this talk, we focus on the semigroup structure of $\mathcal{F}_*^\bullet(R)$. Especially we provide properties on R which imply almost completeness or π -regularity of $\mathcal{F}_*^\bullet(R)$ or which force the idempotents to be trivial. Our results generalize the corresponding results in the noetherian case, proved by Dade, Taussky and Zassenhaus (1961) and Halter-Koch (2007).

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