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ON LATTICES ASSOCIATED TO RINGS WITH RESPECT TO A PRERADICAL

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ABSTRACT. We introduce some new lattices of classes of modules with respect to appropriate preradicals. We introduce some concepts associated with these lattices, such as the σ -semiartinian rings, the σ -retractable modules, the σ -V-rings, the σ -max rings. We continue to study σ -torsion theories, σ -open classes, σ -stable classes. We prove some theorems that extend some known results. Our results fall into well known situations when the preradical σ is chosen as the identity preradical.

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Keywords: Preradical, Lattice of module class, Hereditary torsion class, Boolean Lattice, V-Ring, Max-Ring.

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