

998-16-65

Ana M. de Viola-Prioli (aviola@usb.ve), Departamento de Matematicas, Universidad Simon Bolivar, 89000 Caracas, Venezuela, and **Jorge E. Viola-Prioli*** (jviola@fau.edu), Florida Atlantic University, Department of Mathematical Sciences, 777 Glades Road, Boca Raton, FL 33431. *Divisibility and Factorization of Kernel Functors.*

In this work we will explore the semigroup of kernel functors associated to a generalized discrete valuation ring. We will show that, among other interesting features, this semigroup is linearly ordered under divisibility, and we will present a canonical factorization of kernel functors in terms of irreducible elements. The commutativity of this semigroup as well as the asymmetry of the divisibility condition will also be considered. In a way, these results are closely related to (and in the spirit of) the corresponding results obtained by H.H. Brungs for the lattice of ideals of this type of rings. (Received January 22, 2004)