

1054-16-60

Richard Vale* (rvale@math.cornell.edu), Department of Mathematics, Malott Hall, Ithaca, NY 14853. *A noncommutative completion of the prime spectrum.*

We describe a way of completing a ringed space with respect to a distinguished base of open sets. The completion of $\text{Spec}(R)$ with respect to its usual base of open sets yields a contravariant functor from the category of commutative rings to the category of ringed spaces, which has a faithful extension to the category of all rings. (Received August 31, 2009)