

1041-55-162

Justin Noel* (justin@uchicago.edu), Mathematics Department, 5734 S University Ave,
Chicago, IL 60637. *Generalized cohomology and generalized Witt schemes*. Preliminary report.

The direct sum and tensor product operations on complex vector bundles make $H^*(BU)$ into a “co-Hopf ring.” We study this structure through its associated scheme $Spf(H^*(BU))$. This scheme is closely related to the scheme of Witt vectors. Replacing ordinary cohomology with an even-periodic cohomology theory E , we obtain an analogous relationship with a scheme of Witt vectors twisted by the formal group associated to E . (Received August 10, 2008)