

Year: 2008	Vol.: 72	Fasc.: 3-4
------------	----------	------------

Title: On spectra of abelian group rings

Author(s): Andre Gimenez Bueno and Michael Dokuchaev

In this paper we study the spectrum of integral group rings of finitely generated abelian groups G from the scheme-theoretic viewpoint. We prove that the (closed) singular points of $\text{Spec } Z[G]$, the (closed) intersection points of the irreducible components of $\text{Spec } Z[G]$ and the (closed) points over the prime divisors of $|t(G)|$ coincide. We also determine the formal completion of $\text{Spec } Z[G]$ at a singular point.

Address:

Andre Gimenez Bueno
Departamento de Matemática
Universidade de São Paulo
Rua do Matão, 1010
CEP 05508-090, São Paulo
Brasil
E-mail: angbk@ime.usp.br

Address:

Michael Dokuchaev
Departamento de Matemática
Universidade de São Paulo
Rua do Matão, 1010
CEP 05508-090, São Paulo
Brasil
E-mail: dokucha@ime.usp.br