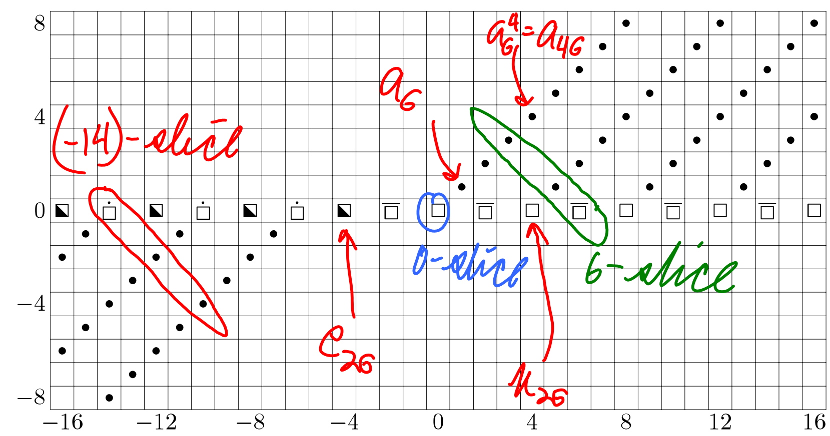

FIGURE 1. The (collapsing) Mackey functor slice spectral sequence for $H\underline{\mathbf{Z}} \wedge \bigvee_{n\in\mathbf{Z}} S^{n\rho_2}$. The symbols are defined in Table 2.

In other words the $RO(G)$-graded Mackey functor valued homotopy of $H\underline{\mathbf{Z}}$ is as follows. For $n > -3/2$ we have

$$\underline{\pi}_i \Sigma^{n\rho_2} H\underline{\mathbf{Z}} = \underline{\pi}_{i-n\rho_2} H\underline{\mathbf{Z}} = \begin{cases} \square & \text{for } n \text{ even and } i = 2n \\ \bullet & \text{for } n \text{ even and } i = 2n-2j \text{ with } 0 < j \le n/2 \\ \overline{\square} & \text{for } n \text{ odd and } i = 2n \\ \bullet & \text{for } n \text{ odd and } i = 2n+1-2j \\ & \qquad \text{with } 0 < j \le (n+1)/2 \\ 0 & \text{otherwise} \end{cases}$$

For $n < -3/2$ we have

$$\underline{\pi}_i \Sigma^{n\rho_2} H\underline{\mathbf{Z}} = \underline{\pi}_{i-n\rho_2} H\underline{\mathbf{Z}} = \begin{cases} \blacksquare & \text{for } n \text{ even and } i = 2n \\ \bullet & \text{for } n \text{ even and } i = 2n+2j-1 \\ & \qquad \text{with } 0 < j \le (-3-n)/2 \\ \dot{\square} & \text{for } n \text{ odd and } i = 2n \\ \bullet & \text{for } n \text{ odd and } i = 2n+2j \\ & \qquad \text{with } 0 < j \le (-3-n)/2 \\ 0 & \text{otherwise} \end{cases}$$

We can use Definition 8 to name some elements of these groups.

Note that $H\underline{\mathbf{Z}}$ is a commutative ring spectrum, so there is a commutative multiplication in $\underline{\pi}_\star H\underline{\mathbf{Z}}$, making it a commutative Green functor. For such a functor $\underline{M}$ on a general group G, the restriction maps are a ring homomorphisms while the transfer maps satisfy the Frobenius relations (1).