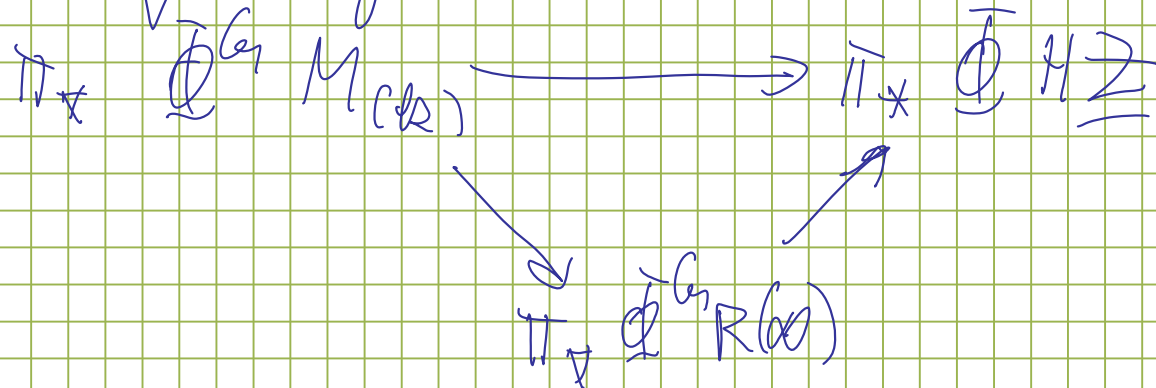


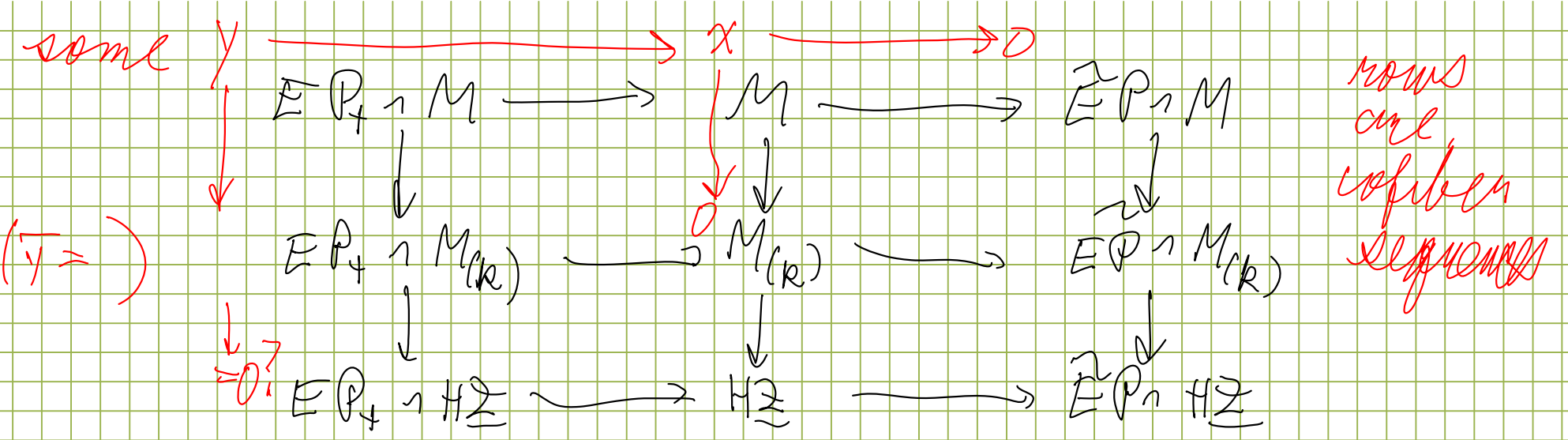
Recall

Prop 7.10 Let $b \in \mathbb{Q}_{20}^{-1} M_{20} \in \pi_2 \mathbb{Q}^G \underline{HZ}$

For each $k > 0$, $b^{2^{k-1}}$ is in the image of



Proving this involves chasing a diagram, the smash of $EP_+ \rightarrow S^0 \rightarrow \tilde{E}P$ and $M \rightarrow M_{(k)} \rightarrow \underline{HZ}$

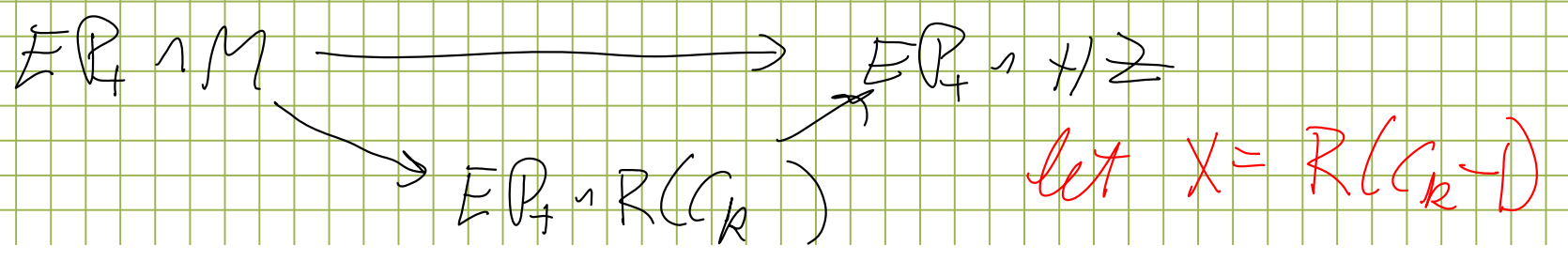


$$x = N \begin{matrix} \mathbb{Z}^m \\ \mathbb{Z} \end{matrix} \begin{matrix} - \\ M \\ \mathbb{C}^k \end{matrix} \in \pi_V^{\mathbb{C}^k} M$$

Prop 7.12 Any choice of y has a $\neq 0$ image

$$\text{im } \pi_V^{\mathbb{C}^k} \text{EP}_4 \cap H^{\pm}$$

This implies the Reduction Theorem.



Will consider the slice tower for X
 We know everything about its restriction
 to H (by inductive hypothesis) and
 hence its smash product with EP_+

Prop 7.14 (i) $\pi_{\nu} EP_+ \wedge P_m X = 0$ for $0 < m < 2d$

(ii) there is an exact sequence

$$\pi_{\nu} EP_+ \wedge P_d X \longrightarrow \pi_{\nu} EP_+ \wedge X \ni \nu_{12} = \downarrow m \nu$$

slice connective
cover \rightarrow

$$\downarrow$$

$$\pi_{\nu} EP_+ \wedge H\mathbb{Z}$$

Pf (i) follows by induction on (6_2)

(ii) The map $\pi_{\nu} EP_+ \wedge P_d X \longrightarrow \pi_{\nu} EP_+ \wedge P_1 X$

is onto we have a cofiber sequence

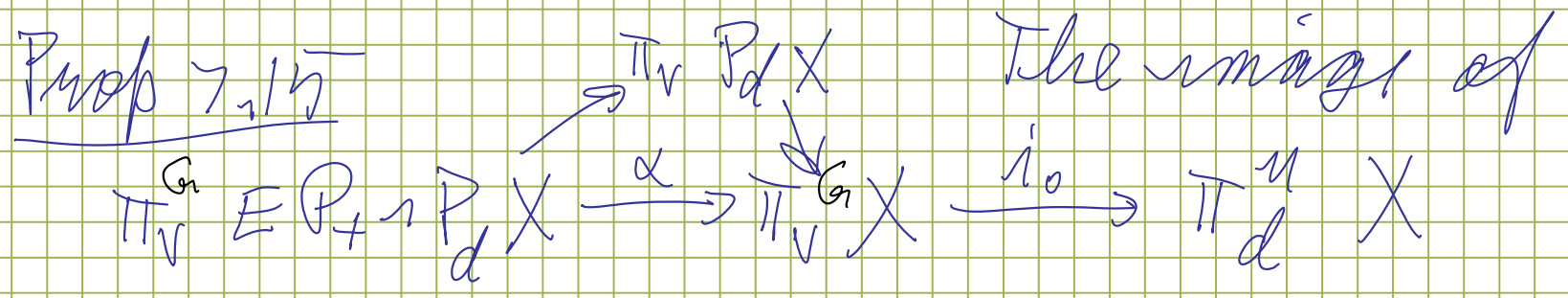
$$EP_{+1}(P_1 X \rightarrow X \rightarrow P_0^0 X)$$

and we know $EP_{+1} P_0^0 X = EP_{+1} H\mathbb{Z} \cong \mathbb{Q}/\mathbb{Z}$ (QED)

It suffices to show $1/k$ is not in the image of $\pi_V EP_{+1} P_d X$.

$$\begin{array}{c} \pi_V EP_{+1} P_d X \\ \parallel \\ \pi_V EP_{+1} P_1 X \end{array}$$

Let $\gamma \in G$ be a generator.



is contained in the image of $1-\gamma$,
 using the action of ZG_n on $\pi_x^{-1} X$.

We will show that $\text{im } \alpha$ is contained
 in the image of $\Gamma_M^G : \pi_V^H X \rightarrow \pi_V^G X$

$$\begin{array}{ccc} & \parallel & \parallel \\ & \pi_V X(G_n/H) & \pi_V X(G_n/G_n) \end{array}$$

Will also show that $\gamma(i_0^* y_R) = -i_0^* y_R$

so $i_0^* y_R$ is not in the image of $(1-\gamma)$

γ maps $i_0(\sqrt{-1} \overline{M}_{G_R}) =: \mathbb{Z}$ and $\gamma(\mathbb{Z}) = (-1)^{G_R} \mathbb{Z} = -\mathbb{Z}$.

Prop 7.16 Let $Y \geq 0$ (i.e. (-1) -slice connected) be a G -spectrum. Then the image of $\pi_0 EP_{+1} Y (G_1/G_1) \rightarrow \pi_0 Y (G_1/G_1)$ is in image of $T_{M_H}^G$.

Prf Since $Y = (-1)$ -slice-connected

$$\begin{array}{ccccc}
 \pi_0^{G_1} C_{2+1} Y & \xrightarrow{\text{onto}} & \pi_0^G EP_{+1} Y & \xrightarrow{\quad} & \pi_0^G Y \\
 \parallel & & & \searrow & \\
 \pi_0^H Y & & & \xrightarrow{T_{M_H}^G} & \text{QED}
 \end{array}$$

Let $Y = \sum_{d \sim v} P_d X$ and get
 Cor 7.17 $\pi_0^G \sum_{d \sim v} P_d X \rightarrow \pi_0^G P_d X$

is in the image of T_{μ}^G .

Cor 7.18 Same for Π_V^G .