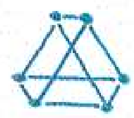
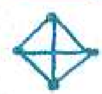
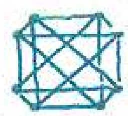
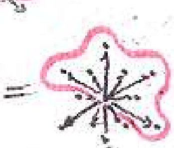
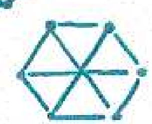
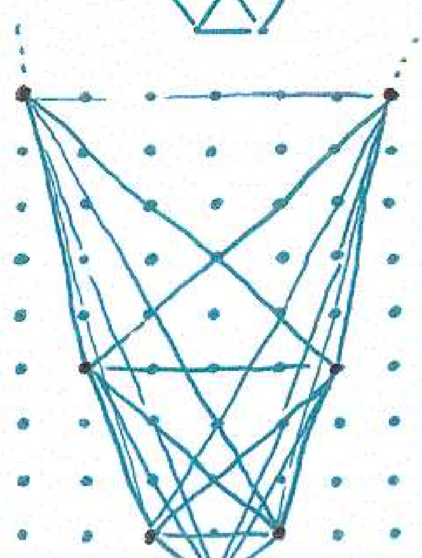
The equivariant 1-skeleton of G/P is encoded by the GKM graph $\Gamma \hookrightarrow \mathfrak{t}^*$.

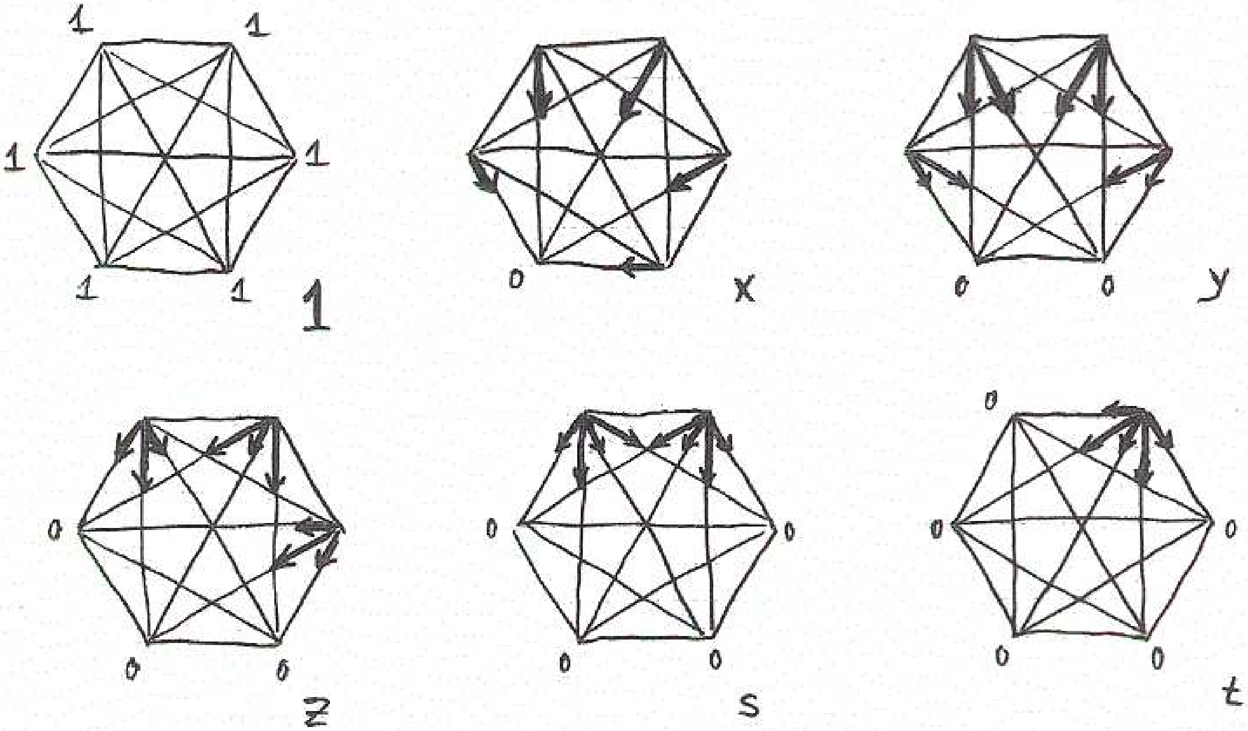
Vertices $= W_G / W_P$

Edges $= ([w], [rw])$ r - refection

<u>Some rank 2 examples:</u>

G	P	G/P	$\Gamma \hookrightarrow \mathfrak{t}^* \simeq \mathbb{R}^2$
$SL(3)$	$\begin{pmatrix} * & * & * \\ * & * & * \\ 0 & 0 & * \end{pmatrix}$	$\mathbb{CP}^2$	
$SL(3)$	$\begin{pmatrix} * & * & * \\ 0 & * & * \\ 0 & 0 & * \end{pmatrix}$	$\mathcal{F}lags(\mathbb{C}^3)$	
$Spin(5)_{\mathbb{C}}$		Isotropic lines in $\mathbb{C}^5$	
$Spin(5)_{\mathbb{C}}$	$B =$ 	Isotropic flags in $\mathbb{C}^5$	
G_2	$P_{long} =$  ...		
$LSL(2)$	loops that extend over $0 \in \mathbb{C}^\times$	$\Omega SU(2)$	

(i) The 6 generators of $E_T^*(G_2/P_{long})$ for $E_T^* = H\mathbb{Z}_T^*$, K_T^* or MU_T^*



A bouquet of arrows $\{\beta_i\}$ represents the class $\prod_i e(\beta_i) \in E_T^*$.

If $E_T^* = H\mathbb{Z}_T^*$, we let $a = e(\longrightarrow)$, $b = e(\nwarrow)$ and compute

$$x(x+a) = y$$
$$x(x+a)(x+b) = 2z$$
$$x(x+a)(x+b)(x+2a+b) = 2s$$
$$x(x+a)(x+b)(x+2a+b)(x+2b+a) = 2t$$

If we want ordinary (non-equivariant) homology, we let $a=b=0$

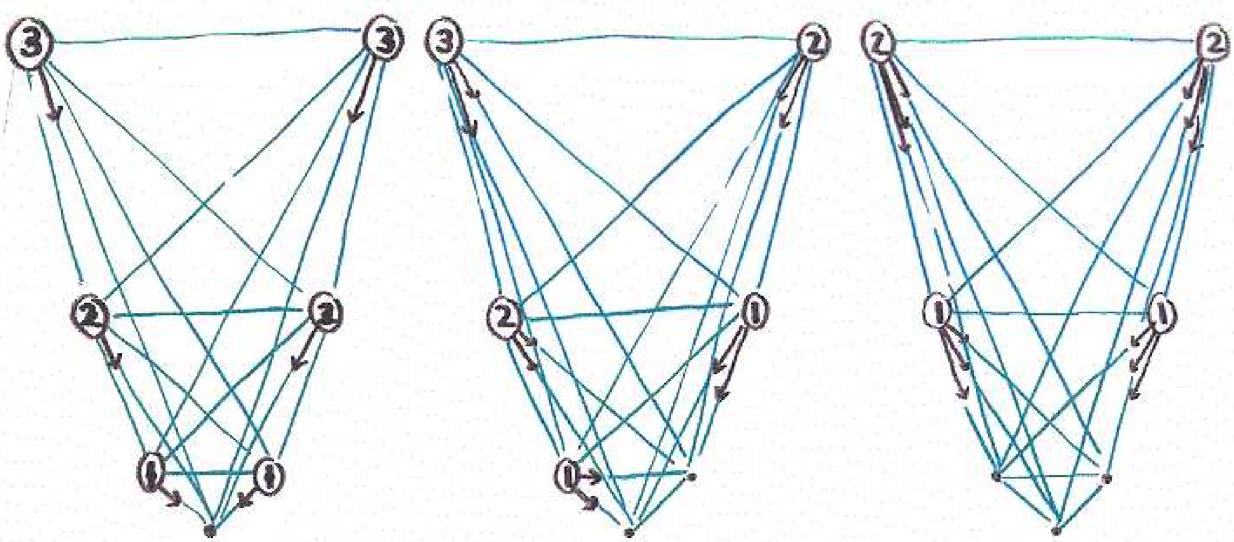
$x^2 = y \qquad x^3 = 2z \qquad x^4 = 2s \qquad x^5 = 2t \qquad x^6 = 0$

For $K_T^*(\Omega SU(2))$ we let

$$P_n(x_1 \dots x_k) = \left[\prod_{i=1}^{k} (1-x_i)\right] \cdot \sum_{a_1+\dots+a_k=0}^{n-1} x_1^{a_1} \cdot \dots \cdot x_k^{a_k}$$

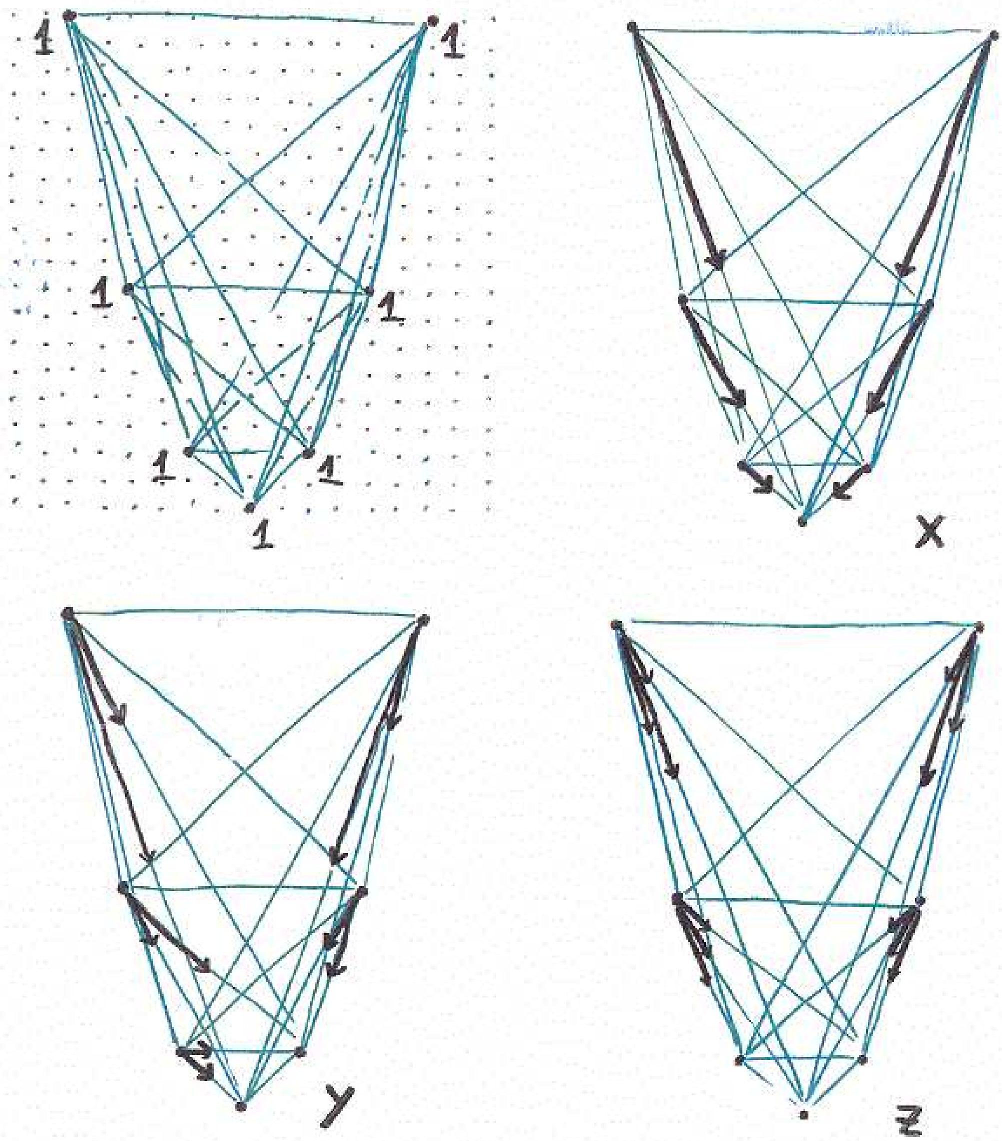
and write  for $P_n(\alpha_1 \dots \alpha_k)$,

where the characters α_i are understood as elements of $K_T^*(pt)$



Here are the first few $K_T^*(pt)$-module generators of $K_T^*(\Omega SU(2))$ represented via their restriction to $\Omega SU(2)^T$. (we ommited 1)

The first few generators of $H^*_T(\Omega SU(2))$ represented via their restriction to $\Omega SU(2)^T$



A bouquet of arrows represents the product of the Euler classes of the corresponding caracters of T.