$$\Rightarrow \quad Hilb_V(QH^{(c)}, t) = \frac{t + t^2 + \cdots + t^{n-1}}{1-t^n}$$

$$= \sum_{\substack{r > 0 \\ r/n \notin \mathbb{Z}}} t^r$$

$\Rightarrow$ for each r not divisible by n

$\exists!$ a copy $V_r^{(c)}$ of V in $S^r(V)$

W.B! $\quad V_r^{(c)}\big|_{\frac{r}{n}} = V_r$!

$\Rightarrow A_r^{(c)} = S(V)\big/ < V_r^{(c)}$

$\Rightarrow A_{n+1}^{(c = \frac{n+1}{n})}$ is a double ~~deformation~~ of H_n.

$f \in S(V)$ is d-quasiharmonic

if $\quad D_p^{(c)}(f) = 0 \quad \forall p \in S^{\leq d}(V)^{S_n}$

Lemma $\quad Hilb_u(QH^{(c;d)}, t)$

$$= \frac{Hilb_u(H^{(c)}, t)}{(1-t^d)\cdots(1-t^n)}$$

$u = $ triv. $\qquad Hilb\left((QH^{(c;d)})^{S_n}, t\right) = \dfrac{1}{(1-t^d)\cdots(1-t^n)}$

$= 1 + t^d + $ Higher powers of t.

$\Rightarrow$ For each $d = 2, \cdots n$, there exists a unique $(d; c)$-quasiharmonic S_n-invariant $e_d^{(c)}$ of degree d.

$e_2^{(c)} = e_2 - \sum_{i<j} x_i x_j \quad , \quad e_3^{(c)} = e_3$