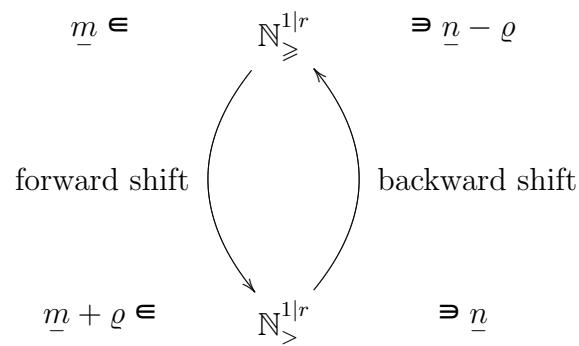


$$N_{\geqslant}^M = \frac{M \xrightarrow{\curvearrowright} N}{\curvearrowright \text{ schwach monoton fallend}}$$

$$\mathbb{N}_{\geqslant}^{1|r} = \frac{\underline{m} = m_1 \cdots m_r}{m_1 \geqslant m_2 \geqslant \cdots \geqslant m_r \geqslant 0}$$

unrestricted partitions Young diagram



$$m_1 \geqslant m_2 \geqslant \cdots \geqslant m_r \geqslant 0$$

$$n_i = m_i + r - i$$

$$\varrho = (r-1|r-2|\cdots|1|0)$$

$$\underline{n} = \underline{m} + \varrho$$

$$\underline{m} = \underline{n} - \varrho$$

$$(0|k)_{\geqslant}^{1|r} = \frac{m_1 \geqslant \cdots \geqslant m_r \geqslant 0}{m_1 \leqslant k}$$

restricted partitions: Young diagram in rectangle $r \times k$

$$\begin{array}{ccc}
\underline{m} \in & (0|k)^{1|r}_{\geqslant} & \ni \underline{n} - \varrho \\
\text{forward shift} & \swarrow \quad \searrow & \text{backward shift} \\
\underline{m} + \varrho \in & (k+r)^{1|r}_{>} & \ni \underline{n}
\end{array}$$

$$k \geqslant m_1 \geqslant m_2 \geqslant \dots \geqslant m_r \geqslant 0$$

$$n_i = m_i + r - i: \quad n_r = m_r \geqslant 0$$

$$n_1 = m_1 + r - 1 \leqslant k + r - 1$$

$$k + r > n_1 > \dots > n_r \geqslant 0$$