

non-convex open cone $\Omega \subset X^\sharp$

slice $\Lambda \subset \Omega \subset X^\sharp$

$$\Omega = \bigcup_{\Lambda} \Lambda$$

$$\Omega \cap \text{co} \bigcup_{0 \leq j \leq q} \Lambda_j = \bigcup_{\Lambda \subset \text{co} \bigcup_{0 \leq j \leq q} \Lambda_j} \Lambda$$

dual slice $\Lambda^\geq = \Lambda^> \times \Lambda^= \subset X$

dual cone $\Omega^\geq = \bigcup_{\Lambda} \Lambda^\geq \subset X$

$iX + \Omega^\geq = \bigcup_{\Lambda} iX + \Lambda^\geq$ open cover

Leray nerves $\bigcap_{0 \leq j \leq q} iX + \Lambda_j^\geq = iX + \bigcap_{0 \leq j \leq q} \Lambda_j^\geq = iX + \overbrace{\text{co} \bigcup_{0 \leq j \leq q} \Lambda_j}^\geq$

$$\gamma \in iX \underset{\omega}{\Delta}^2 \mathbb{C} \Rightarrow \sharp \gamma \in \mathbb{C} \underset{X^\sharp}{\nabla}^2$$

$$\sharp \gamma_\xi = \int_{dy}^{iX} e^{y\xi} y \gamma$$

$$\mathfrak{L} \in \mathbb{C} \underset{\Omega}{\nabla}^2 \Rightarrow \text{cycle } z \mathfrak{L}_\sharp^{\Lambda_0 \cdots \Lambda_q} = \int_{d\xi}^{\Omega \cap \text{co} \bigcup_{0 \leq j \leq q} \Lambda_j} z e_\xi \mathfrak{L}_\xi \in \bigcap_{0 \leq j \leq q} iX + \Lambda_j^\geq \underset{\omega}{\Delta}^2 \mathbb{C}$$

$$\gamma \in iX \underset{\omega}{\Delta}^2 \mathbb{C} \Rightarrow \text{cycle } z \gamma^{\Lambda_0 \cdots \Lambda_q} = \int_{d\xi}^{\Omega \cap \text{co} \bigcup_{0 \leq j \leq q} \Lambda_j} z e_\xi \sharp \gamma_\xi = \int_{d\xi}^{\Omega \cap \text{co} \bigcup_{0 \leq j \leq q} \Lambda_j} \int_{dy}^{iX} z - y e_\xi y \gamma \in \bigcap_{0 \leq j \leq q} iX + \Lambda_j^\geq \underset{\omega}{\Delta}^2 \mathbb{C}$$