

Weil

$$\sum_k c_k V_k$$

$$c_k \in \mathbb{Z}$$

$$\text{codim } V_k = 1$$

principal

$$\gamma \in \mathbb{h} \times_{\mathbb{m}} \mathbb{C}$$

$$(\gamma)_{\pm} = \frac{\mathfrak{h} \in \mathfrak{h}}{\mathfrak{h}\gamma^{\pm 1} = 0}$$

$$(\gamma) = (\gamma)_+ - (\gamma)_- = \sum_i a_i (\gamma)_+^i - \sum_j b_j (\gamma)_-^j$$

$$\sum_i a_i = \sum_j b_j$$

Cartier

$$.\gamma = ({}_i\gamma) \text{ glob sect } \mathcal{M}^* / \mathcal{O}^*$$

$$\mathfrak{h} = \bigcup_i {}^I \mathfrak{h}_i$$

$${}_i\gamma \in {}^i\mathfrak{h} \times_{\mathbb{m}} \mathbb{C}$$

$$\frac{{}_i\gamma}{{}_j\gamma} = {}_{ij}\gamma \in \mathfrak{h}_{ij} \times_{\omega} \mathbb{C}^{\times}$$

$$({}_i\gamma)_{\pm} = \frac{\mathfrak{h} \in \mathfrak{h}_i}{\mathfrak{h}\gamma^{\pm 1} = 0} \Rightarrow ({}_i\gamma)_{\pm} = ({}_j\gamma)_{\pm}$$

$$({}_i\gamma)_{\pm} = ({}_i\gamma)_{\pm}$$

$$.\gamma = (.\gamma)_+ - (.\gamma)_-$$

Picard

$$[.\gamma] = \mathfrak{h} \times_{\mathfrak{h}} \mathbb{C} = (\mathfrak{h}_i) \times_{{}_i\gamma} \mathbb{C}$$