V. Normalized Constant in Polyakov Measure. [5].

Let f be smooth, $\omega_{X/Y}$ the dual of the Hermitian vector sheaf

Then for every $j \geq 1$, there is an algebraic isomorphism

$$M: \lambda(\omega_{X/Y}^{j}) \simeq \lambda(\omega_{X/Y})^{6j^2-6j+1}$$

such that

$$h_Q(M(s), M(s')) = h_Q \exp(a(g, g-j)).$$

VI. Arithmetic Riemann-Roch-Hirzebruch Theorem in General Case.

If we agree that Gillet and Soulé's original "proof" for their "arithmetic Riemann-Roch-Grothendieck theorem" holds for some certain good arithmetic Todd genus almost everywhere. then the arithmetic Riemann-Roch-Hirzebruch theorem has the form

$$\hat{C}_1(\lambda(E), h_Q) = f_*(\hat{C}(E, h))^{(1)} - a(ch E, Td(f) R(f))^{(1)}.$$

So called arithmetic Todd Genus of (E, h) goes to

$$Td^A(E, h) = \hat{Td}(E, h)(1 + a(H(E_\infty)))$$

VII. $H(E)$.

Let $\mathcal{E}$ be a holomorphic bundle on a complex manifold V. $H(\mathcal{E})$ $\in H^{ev}(V)$ in the even complex cohomology of V is ~~defined~~ characterized by the following properties: