$$= t^{-n} \sum_i \left\{ \sum_{v(p)=0} (-1)^i \frac{Td_i(P^1(A_p), \cdots P^i(A_p))}{\det A_p} t^i \right\}$$

⊛ Suppose I am right on the holomorphic Lefschetz fixed-point formula:

$$L(f, \mathcal{O}) = \sum_{f(p_\alpha)=p_\alpha} \frac{\det B_\alpha}{\det(I - B_\alpha)}.$$

$$\Rightarrow \chi(\mathcal{O}_M) = \sum_{v(p)=0} \frac{\det e^{tA_p}}{\det(I - e^{tA_p})} = \sum_{v(p)=0} \frac{1}{\det e^{-tA_p} \det(I - e^{tA_p})}$$

$$= \sum_{v(p)=0} \frac{1}{\det(e^{-tA_p} - I)} = \sum_{v(p)=0} \frac{1}{\det(I - e^{-tA_p})} (-1)^n$$

$$= \sum_{v(p)=0} \frac{1}{\det A_p} \cdot \frac{\det A_p}{\det(I - e^{-tA_p})} (-1)^n$$

$$= \sum_{v(p)=0} \frac{1}{\det A_p} t^{-n} \left\{ \sum_i Td_i(P^1(A), \cdots P^i(A)) t^i \right\}$$

$$= t^{-n} \sum_i \left\{ \sum_{v(p)=0} \frac{Td_i(P^1(A_p), \cdots P^i(A_p))}{\det A_p} \right\} t^i$$ the same as the book

⊛ Furthermore, if we define the Todd polynomials Td_i as follows:

$$\frac{\det A}{\det(I - e^{-tA})} = t^{-n} \left\{ \sum_i Td_i(P^1(A), \cdots P^i(A)) t^i \right\}.$$

$\Rightarrow$ We get $\chi(\mathcal{O}_M) = (-1)^n t^{-n} \sum_i \left\{ \sum_{v(p)=0} \frac{Td_i(P^1(A_p) \cdots P^i(A_p))}{\det A_p} \right\} t^i.$