$$Td_1(P^1) = \frac{P_1}{2} \qquad Td_2(P^1, P^2) = \frac{P^{1^2} + P^2}{12}$$

$$Td_3(P^1, P^2, P^3) = \frac{P^1 P^2}{24}$$ by the following computation

$$\prod_{i=1}^{n} \frac{x_i}{1-e^{-x_i}}$$

$$f(x) = \frac{x}{1-e^{-x}} = 1 - \frac{1}{2}(-x) + \frac{1}{6}\cdot\frac{1}{2!}\cdot(-x)^2 + \cdots$$
$$= 1 + \frac{x}{2} + \frac{x^2}{12} + \cdots$$

$$\Rightarrow \prod_{i=1}^{n} \frac{x_i}{1-e^{-x_i}} = \prod_{i=1}^{n} \left(1 + \frac{x_i}{2} + \frac{x_i^2}{12} + \cdots\right.$$

$$= 1 + \frac{\sum x_i}{2} + \frac{(\sum x_i)^2 + \sum x_i x_j}{12} + \frac{(\sum x_i)(\sum x_i x_j)}{24}$$

According to Griffiths & Harris, the Todd polynomials are different a little bit.

$$g(t) = \frac{-t\lambda}{1-e^{-t\lambda}} = -1 - \frac{1}{2}(t\lambda) - \frac{t^2\lambda^2}{12} + \cdots$$

$$\Rightarrow \prod_{i=1}^{n} \frac{-t\lambda_i}{1-e^{-t\lambda_i}} = \prod_{i=1}^{n}\left(-1 - \frac{1}{2}(t\lambda_i) - \frac{t^2\lambda_i^2}{12} + \cdots \right)$$

$$= (-1)^n \left(1 + \frac{\sum\lambda_i}{2} t + \frac{(\sum\lambda_i)^2 + \sum\lambda_i\lambda_j}{12} t^2 + \frac{(\sum\lambda_i)(\sum\lambda_i\lambda_j)}{24} t^3 + \cdots\right.$$

$$\Rightarrow Td_1(P^1) = (-1)^n \frac{P^1}{2} \qquad Td_2(P^1, P^2) = \frac{P^{1^2} + P^2}{12}(-1)^n$$

$$Td_3(P^1, P^2, P^3) = \frac{P^1 P^2}{24}(-1)^n$$

$$\left(\prod_{i=1}^{n} \frac{-t\lambda_i}{1-e^{-t\lambda_i}} = (-t)^n \prod_{i=1}^{n} \frac{\lambda_i}{1-e^{-t\lambda_i}} = (-1)^n\left(1 + \frac{P^1}{2}t + \cdots\right) \right.$$

$$\left. \Rightarrow \prod_{i=1}^{n} \frac{\lambda_i}{1-e^{-t\lambda_i}} = (-1)^n (-1)^n t^{-n} \left(1 + \frac{P^1}{2} t + \cdots\right) \right)$$