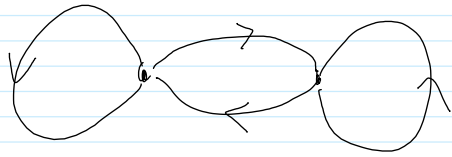


Graphical D-PeGDO

March 14, 2019 7:16 PM

$$e^{\alpha x y} e^{\beta x y} \Big|_{x=y=0} = \sum_{n=0}^{\infty} \frac{\alpha^n \beta^n}{(n!)^2} (n!)^2 = \frac{1}{1-\alpha\beta}$$



$$\sum_{n=1}^{\infty} \frac{x^n}{n} = -\log(1-x)$$

$$\exp \sum \frac{1}{n} \text{tr} A^n = \det(I-A)^{-1}$$

$$\sum \text{tr}(A^n A) = \det(I+A)$$

$$\Rightarrow \exp \left(\sum \frac{(-1)^n}{n} \text{tr} A^n \right) \left(\sum \text{tr}(A^n A) \right) = 1$$