CPSS

Remarks of March 8, 2016

Need to match:

- $V(D) = -(D+|6|^2)\ln(D+|6|^2) + |6|^2 \ln|6|^2 + D$

- $\frac{F_{os}^2}{2} = \frac{F_{xl}^2}{4}$ coef $\longrightarrow$

$$\longrightarrow \frac{1}{3}\cdot\frac{1}{D+|6|^2} + \frac{2}{3}\frac{1}{|6|^2} = \frac{1}{|6|^2} - \frac{1}{3}\frac{D}{D+|6|^2}$$

Introduce $y = \frac{1}{2}\left[S/\Sigma + \bar{S}/\bar{\Sigma}\right] \Rightarrow D/|6|^2$

$z = \frac{1}{2}\left[S/\Sigma - \bar{S}/\bar{\Sigma}\right] \Rightarrow f/|6|^2$

Consider a general function $G(y, z)$

$\int d^4\theta\ G(y, z)$: D^4 should only hit Σ,

otherwise derivatives will be produced

Note, that here: $\cdot\ D \longrightarrow \bar{\nabla}\nabla D$

$\cdot\ 6 \longrightarrow \bar{\nabla}\nabla 6$

$\cdot\ \frac{N}{4\pi}$ overall factor