β^0	$\left(\prod_{s=-\infty}^{\infty}\int_{-\infty}^{\infty}de_s\sum_{i(s)=1}^{2}\right)A_0[e,i]\,D_0[e,i;e',j]=0$
β^1	$\left(\prod_{s=-\infty}^{\infty}\int_{-\infty}^{\infty}de_s\sum_{i(s)=1}^{2}\right)\{A_1[e,i]D_0[e,i;e',j]+A_0[e,i]D_1[e,i;e',j]\}=0$

$$A_0[e',j]\left[\sum_{k'=-\infty}^{\infty}e'(k')\right]=0$$

$$\frac{1}{2m\varepsilon\alpha^2}A_1[e',j]\left[\sum_{k'=-\infty}^{\infty}e'(k')\right]$$

$$=\frac{1}{\varepsilon\alpha}\sum_{k=-\infty}^{\infty}\int_{-\infty}^{\infty}de_k\int_{-\infty}^{\infty}de_{k+1}$$

$$A_0[\cdots;e'_{k-1},j_{k-1};e_k,3-j_k;e_{k+1},3-j_{k+1};e'_{k+2},j_{k+2};\cdots]$$

$$\eta_{3-j(k)}(e_k,e'_k)\,\xi_{3-j(k+1)}(e_{k+1},e'_{k+1})$$

$$A_0[e,i]=\prod_{k=-\infty}^{\infty}\delta(e_k)$$

$$A_1[e,i]=2m\alpha\sum_{k=-\infty}^{\infty}\frac{1}{e_k+e_{k+1}}[\cdots\delta(e_{k-1})\eta_{3-i(k)}(0,e_k)\xi_{3-i(k+1)}(0,e_{k+1})\delta(e_{k+2})\cdots]$$