

$$M = \sum_{n=-\infty}^{\infty} \sum_{m=-\infty}^{\infty} \int d\nu \int d\mu \frac{(-1)^{n+m}}{4} \frac{\Gamma(-i\nu - \frac{n}{2})}{\Gamma(1 + i\nu - \frac{n}{2})} \frac{\Gamma(i\mu + \frac{m}{2})}{\Gamma(1 - i\mu + \frac{m}{2})} \frac{\Gamma(i(\nu - \mu) + \frac{m-n}{2})}{\Gamma(1 - i(\nu - \mu) + \frac{m-n}{2})} \alpha_1^{n/2} \beta_1^{i\nu} \alpha_2^{m/2} \beta_2^{i\mu},$$