# Errata - Generalization of NLIN model for WDM systems considering fiber attenuation and Raman gain

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In equation (18) and (19) the pulse conjugation is wrong. From equation (16) and (17), it is possible to deduce the following

$$S_{h,k,m} = \int_{z_0}^{L} dz f_A(z) \int_{-\infty}^{\infty} dt g^{(0)*}(z,t) g^{(0)}(z,t-hT) g^{(0)*}(z,t-kT) g^{(0)}(z,t-mT) \tag{1}$$

for the SPM, and

$$X_{h,k,m} = \int_{z_0}^{L} dz f_B(z) \int_{-\infty}^{\infty} dt g^{(0)*}(z,t) g^{(0)}(z,t-hT) g^{(0)*}(z,t-kT-\beta_2\Omega z) g^{(0)}(z,t-mT-\beta_2\Omega z) \tag{2}$$

for the XPM.

In equation (20), the approximation is missing a power of two in the exponential, which reads

$$g^{(0)}(z,t) \approx \sqrt{\frac{i}{2\pi\beta_2 z}} \exp\left[-\frac{it^2}{2\beta_2 z}\right] \hat{g}\left(0, \frac{t}{\beta_2 z}\right) \tag{3}$$