

# 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

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

for the SPM, and

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

for the XPM.

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

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