

# **Abstract**

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## **FWM Suppression in WDM Systems Using Advanced Modulation Formats**

In this paper, four wave mixing (FWM) and its impact on wavelength division multiplexing (WDM) is examined through a computer simulation (VPI Transmission Maker) using different advanced modulation formats. The modulation formats covered are NRZ, RZ, CRZ, CS-RZ and duobinary. The obtained results assure that the duobinary format yields the better performance corresponding to less FWM product powers of lower, upper, lowest and highest neighborhood channels.