

A new optical technique for suppression of electronic interference is detailed theoretically and experimentally. The method is based on operating an angle-modulated photonic link in its nonlinear regime, where Bessel functions govern the response. This novel signal-processing technique is analyzed for optical intensity and phase modulation. Experimental results demonstrate suppression of continuous-wave, pulsed, and chirped signals at levels ranging from at least 30 dB to upwards of 70 dB relative to small-signal conditions.