

# Abstracts

## Simultaneous TDM/FDM Digital Optical Transmission with Polarization-Diversity Heterodyne Detection

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*M.L. Stevens, B.R. Hemenway and S.B. Alexander. "Simultaneous TDM/FDM Digital Optical Transmission with Polarization-Diversity Heterodyne Detection." 1994 MTT-S International Microwave Symposium Digest 94.1 (1994 Vol. I [MWSYM]): 171-173.*

A rapidly-tunable optical transmitter and a rapidly-tunable heterodyne receiver are used to demonstrate simultaneous time-division-multiplexed and frequency-division-multiplexed (TDM/FDM) digital communication at 1.244 Gbps over a single optical fiber with a channel switching time under 62.5 nsec and a channel dwell time of 1.953  $\mu$ sec. An IF bandwidth spanning 6-18 GHz is used with post-detection filtering.

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