# Abstracts

## Optical distribution of local oscillators for a rotating antenna

*M.-B. Bibey, S. Formont, F. Deborgies, C. Moronvalle, G. Auvray and A. Brillman. "Optical distribution of local oscillators for a rotating antenna." 2000 MTT-S International Microwave Symposium Digest 00.2 (2000 Vol. II [MWSYM]): 1257-1260.*

Optical LO distribution to a rotating antenna has been studied. An optical demonstrator has been built with four microwave links and one optical digital link. Signals at different wavelengths are travelling in both directions along the same optical fibre. Measurements of additive phase noise show that the required specifications in S- and C-band can be reached: -135 dBc/Hz at 10 kHz offset. Electric isolation between channels and optical feedback inducing degradation of phase noise have also been studied and solutions have been proposed to improve these parameters.

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