

# **A single channel polarimetric OTDR for the measurement of the backscattered SOP evolution along a fibre with twist**

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## **Abstract**

We show how the state of polarisation (SOP) evolution along an optical fibre can be measured non-destructively by using a commercial OTDR modified to act as a single channel polarimetric OTDR (POTDR). From the SOP evolution, the linear birefringence and twist can be calculated along the fibre, thus identifying fibre sections with relatively high and low polarisation mode dispersion (PMD).