



Contribution ID: 602

Type: **Poster**

Preferential coupling of NV nanodiamond to doped fibre and spliced SMF

Tuesday 13 December 2022 18:45 (15 minutes)

We have investigated the preferential coupling of the nanodiamond into the guided-modes of a step-index fibre. To explore the possibility of long-distance magnetic field sensing we have also modelled the coupling efficiency of splicing diamond-doped fibres to commercial SMF-28e fibres.

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Session Classification: Poster session

Track Classification: WSOF: WSOF: Novel materials