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## Design of side-coupling travelling-wave deflector with variable polarization

A novel travelling-wave (TW) deflector with variable polarization has been proposed and studied by researchers at CERN, DESY and PSI. The dual polarization mode coupler is the key component generating circular polarization TE<sub>11</sub> mode into the structure from axis. In this paper, a design of side-coupling TW deflector with variable polarization realized by a phase shifter and E-hybrid is proposed to reduce the negative effect caused by the machining error of the coupler.

### Footnotes

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