

# PARITY-TIME SYMMETRIC WHISPERING-GALLERY-MODE MICROCAVITIES SENSOR

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A non-reciprocal transmission device based on PT symmetry was previously theorized but never before constructed and shown to work at useful optical wavelengths. The new structure allows creation of the miniaturized optical isolation function without use of the century+ known Faraday effect. Optical isolation for other optical systems (e.g. storage; industrial) is possible.

## **Key Features:**

- Small size
- Reciprocity / non-reciprocity controlled by gain.