

Erratum: Coherent-population-trapping resonances in buffer-gas-filled Cs-vapor cells with push-pull optical pumping [Phys. Rev. A **87**, 013416 (2013)]

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Erroneous information is reported in paragraph 2 of Sec. III (titled EXPERIMENTAL SETUP). The text from “The laser source..” to “..at 1000s” should be replaced by “The laser source is a 1-MHz-linewidth DFB diode laser (Eagleyard EYP-DFB-0895) tuned on the Cs D_1 line at 894.6 nm [35]. The laser frequency is shifted from Cs atom resonance by about 4.596 GHz.”

CPT spectroscopy experiments reported in this article were realized by externally modulating the laser beam using a Mach-Zehnder electro-optic modulator (EOM), driven at 4.596 GHz with carrier suppression operating bias point. In this configuration, shifting the laser frequency by about 4.596 GHz from Cs atom resonance is the only condition to allow the pumping of the atoms in the coherent-population-trapping state with first-order optical sidebands at the output of the EOM.

For clarification, Fig. 2 of the article should be replaced by Fig. 2 below. The figure caption remains the same.

These changes do not affect the results and conclusions of the original paper.

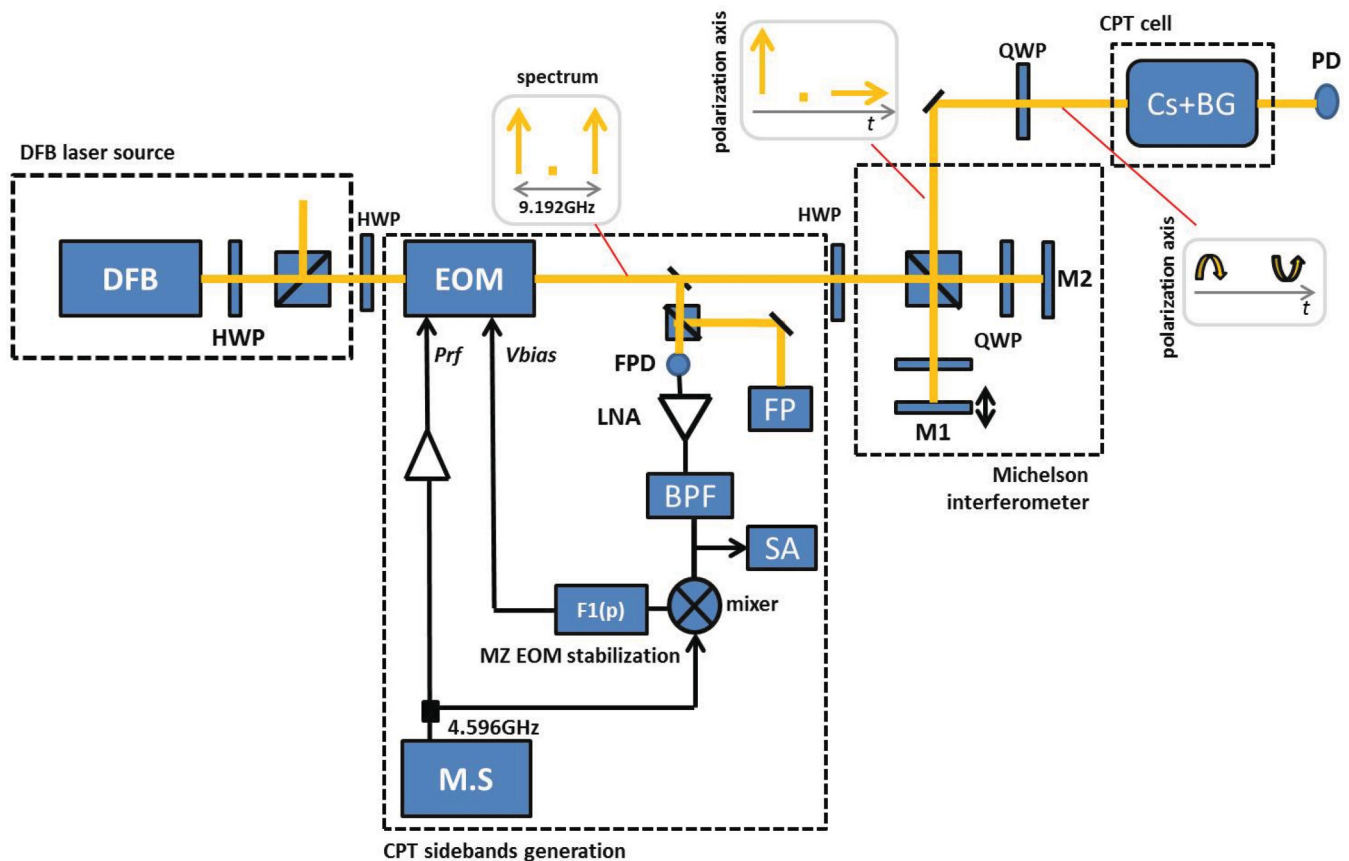


FIG. 2. (Color online) Experimental setup used to detect high-contrast CPT resonances in Cs-vapor cells with PPOP. A Mach-Zehnder electro-optic modulator (MZ EOM) is used to generate optical sidebands with linear and parallel polarizations, frequency separated by the clock transition (9.192 GHz). A microwave-based stabilization technique of the transfer function operating point is implemented to stabilize the optical carrier rejection. The Michelson interferometer is used to obtain at the output of the cube C1 two time-delayed optical components with orthogonal linear polarizations. The last quarter-wave plate before the cell creates alternating right and left circular polarizations for push-pull interaction. The photodiode PD detects the transmitted optical power through the vapor cell. MS, microwave synthesizer; PD, photodiode; EOM, electro-optic modulator; FPD, fast photodiode; Cs + BG, Cs + buffer gas; QWP, quarter-wave plate; HWP, half-wave plate; BPF, bandpass filter; M1 and M2, mirrors; LNA, low-noise amplifier; SA, microwave spectrum analyzer; FP, Fabry-Perot interferometer.