Erratum and Note: Measurement of Zeeman Shift of Cesium Atoms Using an Optical Nanofiber [Chin. Phys. Lett. 35 (2018) 083201]

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Our recent article (Chin. Phys. Lett. 35 (2018) 083201) measured the Zeeman shift of cesium atoms using an optical nanofiber. Before our work, Watkins *et al.* (Ref.[17] in our article) had demonstrated the Zeeman shift also using an optical nanofiber in rubidium atoms. Watkins *et al.* reported on the observation of a Zeeman shift (order of 100 MHz) of the Doppler-broadened D2 transition of both ^{85}Rb and ^{87}Rb isotopes via transmission through a 400-nm diameter optical nanofiber in the presence of a DC magnetic field. Their experiment is the first demonstration of Zeeman shift measurement using an optical nanofiber. Their work truly motivates us to investigate the case of cesium atoms and help us a lot in writing of our article. However, we did not sufficiently cite this work and did not clearly state their innovative proposals in some parts of our texts. We would like to make some necessary corrections to our article for clarity. The corrections are listed in the following.

(1) Rewrite the description on the formula of frequency shift of atoms under magnetic field: "In the absence of a magnetic field, the two atomic transitions are degenerate and absorb both polarizations equally. If a magnetic field exists, this degeneracy will be lifted (the Zeeman shift) and the system will become dichroic. The σ^+ and σ^- spectra will be absorbed at the higher and lower frequencies, respectively. We can obtain the frequency shift according to[24]" is replaced by "The transition frequencies induced by this two components are shifted to opposite directions under a magnetic field, which is well known as Zeeman shift. The frequency shift can be written as this [24]".

(2) Rewrite the unstable beam intensity and credit Ref. [17] on rotating the $\lambda/2$ plate: "During the measurements presented here, the intensities of the two spectra have a tendency to vary in magnitude as a function of time. To maintain the signal, it is necessary to rotate the $\lambda/2$ plate by a few degrees" is replaced by "During our measurement, the intensities of two beams may have some drift. To balance the intensity, we also rotate the $\lambda/2$ plate that was introduced before by Watkins *et al.*[17]".

(3) State that Ref. [17] firstly proposed the Berek compensator and polarization-maintaining tapered fiber to stabilize the polarization: "In addition, we propose that the change of beam polarization in the nanofiber resulting from fiber birefringence needs to be addressed by implementing either a Berek compensator[29] before the fiber coupler or a polarization-maintaining tapered fiber[30]" is replaced by "Watkins *et al.*[17] also proposed to use Berek compensator[29] before the fiber coupler or a polarization-maintaining tapered fiber[30] can solve this problem".

Even our sample is cesium atoms and has its special characteristic, we should also pay attention to writing contexts and credit previous work, but we did not. We apologize for this kind of unsuitable writing.

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