First, we reply the query concerning the “Corresponding author” note. Please restore it as our original manuscript shows, which is very important for us.

In the following, we list the corrections we make for the proof.

1. Page 1, second paragraph: “and LSST [6] will be established” should be changed to “and LSST [6] will be implemented”, i.e., “established” is replaced with “implemented”.

2. Page 2, second paragraph: “with the accumulation of the amount of observed standard siren events” should be changed to “with the accumulation of observed standard siren events”, i.e., “the amount of” is removed.

3. Page 3, first paragraph: “CE will play in the combination with” should be changed to “CE will play in combination with”, i.e., “the” is removed.

4. Page 3, below eq. (2.2): “the form of E(z)” should be changed to “the forms of E(z)”.

5. Page 3, below eq. (2.3): “are the corresponding antenna” should be changed to “are the antenna”, i.e., “corresponding” is removed.

6. Page 3, eqs. (2.4) and (2.5) should share the same equation number, and so the extra number (i.e., 2.4) should be removed.

7. Page 4, eq. (2.6): “cos(2\psi” should be “cos(2\psi)”, i.e., the missing half bracket should be added, for both two equations.

8. Page 4, below eq. (2.8): “denotes the epoch of the merger” should be changed to “denotes the time of merger”; and “The definitions of the function” should be “The definitions of the functions”.

9. Page 6, below eq. (3.8): “measurement of the redshift” should be “measurement of the redshifts”; and “GW events of the BNS” should be “GW events of BNS mergers”.

10. Page 10, below Table 5: “CBS+CE” should be changed to “GW”.

11. Page 13, the first paragraph: “wCDM model and CPL model” should be “the wCDM model and the CPL model”; the last paragraph: “those from the ET” should be “those from ET”.

12. Page 13, the section of acknowledgments: we add two additional grants at the end of this section, i.e., “the Liaoning Revitalization Talents Program (Grant No. XLYC1905011), and the Fundamental Research Funds for the Central Universities (Grant No. N2005030)”.

Since there are too many places to be corrected, we feel that it seems necessary to make a second proofreading. Thanks a lot!