

Summary of revisions made

1. **Sec. 2.1, page 2, lines 53 - 61:** Clarification of cold electron assumption and its validity
2. **Sec. 2.1, page 3, lines 68 - 69:** Consequence of revision 1., we now already define the number density “ n ” and the mean velocity “ u_c ” before equations (1)
3. **Sec. 2.2, page 3, equation (2a):** Typographical correction: we replaced “ v ” with “ u_c ”
4. **Sec. 3, page 6, lines 151 – 154:** New statement that Gauss’s law is not satisfied exactly by our schemes since we do not consider longitudinal perturbations.
5. **Sec. 3.1, page 8, lines 188 – 192:** Some new words regarding the used time stepping scheme for the standard scheme (Crank-Nicolson)
6. **Sec. 3.2, page 11, Fig. 3:** Typographical correction: we replaced “in” with “is” in the caption of Fig. 3
7. **Sec. 3.2, page 13, equation (38):** Typographical correction: we replaced “ e_j ” with “ e_i ” in equation (38)
8. **Sec. 3.2, page 16, lines 358 and 371:** Typographical corrections: we replaced the noun “proof” by the verb “prove”
9. **Sec. 3.2, page 18, lines 480 – 482:** New statement regarding the efficiency of the schemes with respect to computational costs
10. **Sec. 4.1, page 19, lines 442 - 443:** Clarification that our schemes work in principle with basis functions of arbitrary polynomial degree