Review Report on

"This is the title of the journal article"

by Reviewer

This article is devoted to developing a new method for the model equation. This manuscript aims to give upper and lower bounds for the posterior error estimate. The goal of this manuscript is to provide comprehensive information on the topic. The results obtained in this manuscript are very meaningful, providing valuable insights into the development of the XXX method for the model equation. The main contributions of this paper are: (1) The first innovation of the paper; (2) The second innovation of the paper.

The reviewer has the following comments.

- 1. Page 2, Line 12: "Expression A" should be "Expression B";
- 2. Page 3, Line 5: The notation "u(t)" should be " $\tilde{u}(t)$ ";
- 3. Page 5, Line 8: The value ranges for the parameter C in equation (2.1) is not clear, please give a little more detail about it.
- 4. Page 8, Line 4: It should be added a comma.
- 5. Page 10, Line -2: The function f(x) = b contradicts with the definition of f(x) = a.