

Review of the manuscript "Support theorem for random evolution equations in strong topology"

Description of the manuscript.

In the manuscript the authors want to prove a result on the topological support of a random evolution equation. They adapted and extended a method developed by Millet and Sanz-Sole (1994).

Main comments.

- The main remarks concern the expositions and proofs of the results. Indeed, the rigor of some of the results is not ideal and a better explanation of the ideas and the proofs it will be convenience for the readers but I do not know if this is doubt to the space of the journal.
- There is a bit lack of explanation concerning the methodology used to prove the main result. I have several questions about it, for instance, regarding the extension of the method proposed by Millet and Sanz-Sole, What constitutes this extension? What were the major obstacles to obtaining the main result?
- I suggest rewrite the manuscript, in such way that the presentation of the manuscript improves.
- There are several typos, I put some of them below.
- I do not understand the beginning of the proof of the Proposition 3.2. Clarity is needed in that part of the proof.

Some typos.

Here I put some typos I found, however I suggest a careful reading of the manuscript by the authors in order to improve the presentation of the manuscript.

- Page 4, line 13. It say $\frac{k}{2^n} \leq t < \frac{k-1}{2^n}$ it probably must be $\frac{k}{2^n} \leq t < \frac{k+1}{2^n}$. Otherwise, the set of t such that $\frac{k}{2^n} \leq t < \frac{k-1}{2^n}$ is $\emptyset$.
- Page 6, line -1. The right side of the inequality say $C(n, C_F, C_H, C_I, C_B)|t - s|$ it must be $C(n, C_F, C_H, C_I, C_B)|t - s|^p$. The same in Page 7, line -10.
- Page 7, line 2. The righ side of the equation say $\mathbb{E}\left(\left|\int_s^t G(K_{\underline{u}_n}, Z_u)\dot{\omega}_u^n du\right|^{2p}\right)$, it must be $\mathbb{E}\left(\left|\int_s^t G(K_{\underline{u}_n}^n, Z_u)\dot{\omega}_u^n du\right|^{2p}\right)$.
- Page 7, line 14. The integral $\mathbb{E}\left(\left|\int_{\underline{s}_n}^s G(K_{\underline{u}_n}^n, Z_u)\dot{\omega}_s^n du\right|^{2p}\right)$ probably should be $\mathbb{E}\left(\left|\int_{\underline{s}_n}^s G(K_{\underline{u}_n}^n, Z_u)\dot{\omega}_u^n du\right|^{2p}\right)$
- Page 7, line -14. Same typo as before. Also, the integration limits in the right side of the equation are probably not correct. It say,

$$\mathbb{E}\left(\left|\int_s^t G(K_{\underline{u}_n}^n, Z_u)\dot{\omega}_s^n du\right|^{2p}\right)$$

it must be

$$\mathbb{E}\left(\left|\int_{\underline{s}_n}^s G(K_u^n, Z_u) \dot{\omega}_u^n du\right|^{2p}\right)$$