Erratum

Poisson-Vlasov: stochastic representation and numerical codes

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In equations (7) and (12)

$$\frac{\vec{\xi_2} \cdot \hat{\xi}_1'}{\gamma(|\xi_2|)}$$

should be replaced by

$$\frac{\left(\vec{\xi_2} + s\dfrac{\vec{\xi_1}}{\gamma(|\xi_2|)}\right) \cdot \hat{\xi}_1'}{\gamma\left(\left|\xi_2 + s\dfrac{\xi_1}{\gamma(|\xi_2|)}\right|\right)}.$$

This replacement in no way affects the existence of the stochastic *process I*, nor the representation **proposition 1** which remains valid. However, although the stochastic *process II*, defined by equation (20), is still a well-defined and convergent process, it does not provide a complete representation for the solutions of the Poisson-Vlasov equation. Therefore proposition 2 is not correct.

This in no way affects the construction of the probabilities needed for the numerical evaluation of the solutions, derived in Section 3. Also the numerical results for the examples studied in Section 3 are qualitatively the same, because of the small contribution of the trees that are neglected when instead of the process I one considers process II.

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