

## ***Interactive comment on “Magnetosheath jet properties and evolution as determined by a global hybrid-Vlasov simulation” by Minna Palmroth et al.***

**Minna Palmroth et al.**

[minna.palmroth@helsinki.fi](mailto:minna.palmroth@helsinki.fi)

Received and published: 9 May 2018

Dear Dr Facsko,

As for the title of your comment, according to Merriam-Webster dictionary, the definition of physics is “a science that deals with matter and energy and their interactions, by looking at a) processes and phenomena of a particular system, or b) the physical properties and composition of something”. This paper looks at b) the physical properties (i.e., size) of a magnetosheath jet, something that has not been done before with a real-size kinetic magnetospheric simulation, and a) the process at which the jet is formed by foreshock – bow shock interactions, again something that has not been looked at with a real-size kinetic magnetospheric simulation before.

C1

As for the questions in your comment, please see the submitted manuscript.

On behalf of all the co-authors, Minna Palmroth

---

Interactive comment on Ann. Geophys. Discuss., <https://doi.org/10.5194/angeo-2018-20>, 2018.

C2