Esho raz ob etom

Let M be (super)manifold. Consider $\Pi^\varepsilon(T^*M)$, $\varepsilon = 0, 1$; if $\varepsilon = 0$ this is just T^*M, and if $\varepsilon = 1$ this is just ΠT^*M.

There is canonical Poisson ε-bracket $[\_, \_]_\varepsilon$ on $\Pi^\varepsilon T^*M$ this is just canonical *even* Poisson bracket on T^*M and this is just canonical *odd* Poisson bracket (antibracket, Buttin bracket) on ΠT^*M.

Let H be an arbitrary function of parity p on $\Pi^\varepsilon T^*M$ which obeys classical master equation

(Notice that in the case if $p = \varepsilon$ then master- equation is obeyed automatically.)

Proposition Let H be an arbitrary function of parity $p = \varepsilon + 1$ on $\Pi^\varepsilon T^*M$ which obeys classical master equation

$$[H, H]_\varepsilon = 0\,.$$

Then the function H defines

a) homotopy ε-Poisson bracket

$$[\emptyset]_\varepsilon\,,\quad [\_, \_]_\varepsilon\,,\quad [\_, \_, \_]_\varepsilon\,,\quad [\_, \_, \dots, \_]_\varepsilon\,,\quad \dots$$