`Again and again` sign conventions

Lie algebra of parity ε

$L = L_0 + L_1$ with operation $[u, v]$ which is bilinear:

$$[\lambda u, v] = \lambda[u, v]\,, [u, v\lambda] = [u, v]\lambda\,,$$

(no sign for arbitrary $\varepsilon = 0, 1$!)

Operation u, v such that $p([u, v]) = p(u + v + \varepsilon)$

$$[u, v] = -[v, u](-1)^{(u+\varepsilon)(v+\varepsilon)}$$

Jacobi identity:

$$[u, [v, w]] = [[u, v], w] + (-1)^{(u+\varepsilon)(v+\varepsilon)}[v, [u, w]]\,.$$

If L is Lie algebra of parity ε, then ΠL becomes Lie algebra of parity $\varepsilon + 1$ with

$$[\Pi u, \Pi v] = \Pi\,[u, v]\ .$$

No extra sign!

Poisson algebra

It is Lie algebra with associative multiplication:

$$\{f, gh\} = \{f, g\}h + h\{f, g\}(-1)^{(a+1)b}$$

(Irrelevant of sign?)