

Corrections for  
**Integration and Microlocal Analysis in  
Colombeau Algebras of Generalized  
Functions**

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Günther Hörmann  
Institut für Mathematik, Universität Wien  
Guenther.Hoermann@univie.ac.at

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The following list includes corrections to some (mathematical) misprints and a reparation of the assertion of Theorem 16 causing also slight changes in Definition 14.

[p.335] Example 4.(ii), 6.line: reproduces  $\mathcal{G}_\tau$

[p.336] Formula in 2.par:  $l!$  in the denominator (instead of  $k!$ )

[p.337] Bottom line:  $d(\phi)^{k+1}$  in the denominator

[p.340] 1.par, formula:  $\varepsilon^{q-N}$  on the r.h.s. of the estimate

[p.341] Definition 14 should be changed: For  $N \in \mathbb{N}_0$  define  $\mathcal{G}_{\tau,N}^\infty$  to be the subalgebra ... with the following property:  $\forall \alpha \in \mathbb{N}_0^n$  ...

At the end of the definition add

$$\mathcal{G}_\tau^\infty = \bigcup_{N \in \mathbb{N}_0} \mathcal{G}_{\tau,N}.$$

Equation (8):  $\varepsilon^{-N}$  on the r.h.s.

[p.342] Theorem 16: the statement has to be corrected to  $\mathcal{G}_{\tau,0}^\infty \cap \mathcal{S}' = \mathcal{O}_M$ . Observe that for  $N > 0$  the constant  $C_\phi$  appearing at the end of the proof is 0. (And the first part showed indeed that  $\mathcal{O}_M$  is included in  $\mathcal{G}_{\tau,0}^\infty \cap \mathcal{S}'$ .)

[p.347] 8.line from bottom:  $B_\varepsilon(0) = \phi^{(l)}(0)/\varepsilon^{l+1}$

[p.348] 7.line:  $\mathcal{F}_S W_1(\phi, -\xi) = \overline{\mathcal{F}_S W_1(\bar{\phi}, \xi)}$