

# Corrections of Some Errors in my Papers

**Peter WAGNER**

University of Innsbruck, Technikerstr. 13, A-6020 Innsbruck, Austria

email: wagner@mat1.uibk.ac.at

www: <http://techmath.uibk.ac.at/wagner>

October 15, 2022

**Sur quelques propriétés des espaces  $\mathcal{D}'_{L^p}$  de Laurent Schwartz,  
joint work with N. Ortner, Bolletino U.M.I. (6) 2-B (1983) 353–375**

Page 365, line 12 from above: Read “(a) Estimation de l’intégrale sur  $\bigcup_{m=1}^{\infty} K_m$ ”  
instead of “(a) Estimation de l’intégrale sur  $\bigcup_{m=0}^{\infty} K_m$ ”

**Die Singularitätenfunktionen der gespannten Platte und der  
Kreiszyinderschale, J. Appl. Math. Phys. (ZAMP) 35 (1984) 723–727**

1. Page 726, line 6 from above: Read

$$“T_1 = -\frac{1}{4\lambda\sqrt{i}\pi} \int_0^{x_1} K_0(\lambda\sqrt{i(t^2+x_2^2)})sh(\lambda\sqrt{i}t) dt - \frac{1}{4\pi} \int_0^{|x_2|} (|x_2| - t)K_0(\lambda\sqrt{i}t) dt,”$$

instead of

$$“T_1 = -\frac{1}{4\lambda\sqrt{i}\pi} \int_0^{x_1} K_0(\lambda\sqrt{i(t^2+x_2^2)})sh \lambda t dt - \frac{1}{4\pi} \int_0^{|x_2|} (|x_2| - t)K_0(\lambda\sqrt{i}t) dt,”$$

2. Page 726, line 6 from below: Read

$$“h^{IV} = A_0 = -\frac{3}{16\pi\lambda^2} \text{kei}(\lambda|x_2|) + \frac{1}{4\pi} \int_0^{|x_2|} (|x_2| - t) \text{ker}(\lambda t) dt,”$$

instead of

$$“h^{IV} = A_0 = -\frac{3}{16\pi\lambda^2} \text{kei}(\lambda|x_2|) + \frac{1}{4\lambda\pi} \int_0^{|x_2|} (|x_2| - t) \text{ker}(\lambda t) dt,”$$

3. Page 726, line 5 from below: Read

$$“h = -\frac{1}{32\pi\lambda^2} \int_0^{|x_2|} (|x_2| - t)^3 \text{kei}(\lambda t) dt + \frac{1}{480\pi} \int_0^{|x_2|} (|x_2| - t)^5 \text{ker}(\lambda t) dt.”$$

instead of

$$“h = -\frac{1}{32\pi\lambda^2} \int_0^{|x_2|} (|x_2| - t)^3 \text{kei}(\lambda t) dt - \frac{1}{480\pi} \int_0^{|x_2|} (|x_2| - t)^5 \text{ker}(\lambda t) dt.”$$

4. Page 727, reference [8]: Read “L. Schwartz” instead of “L. Schwarz”

**Applications of weighted  $\mathcal{D}'_{L^p}$ -spaces to the convolution of distributions, joint work with N. Ortner, Bull. Polish Acad. Sci. Math. 37 (1989) 579–595**

1. Page 582, fifth line from below: Read

$$“\mathcal{D}'_{L^p, \mu} := \{T \in \mathcal{D}' : (1 + |x|^2)^{\mu/2} T \in \mathcal{D}'_{L^p}\}”$$

instead of

$$“\mathcal{D}'_{L^p, \mu} := \{T \in \mathcal{D}'(1 + |x|^2)^{\mu/2} T \in \mathcal{D}'_{L^p}\}”$$

2. Page 584, line 6 from above: Read

$$“\mathcal{D}'_{L^1, \alpha} \times \mathcal{D}'_{L^\infty, -\alpha} \rightarrow \mathcal{D}'_{L^\infty, -|\alpha|}, \quad (S, T) \mapsto S * T,$$

instead of

$$“\mathcal{D}'_{L^1, \alpha} * \mathcal{D}'_{L^\infty, -\alpha} \rightarrow \mathcal{D}'_{L^\infty, -|\alpha|}, \quad (S, T) \mapsto S * T,$$

3. Page 588, line 8 from above: Read “where  $\mathcal{O}'_C$  has been defined in ([12], p. 244),” instead of “where  $\mathcal{O}_C$  has been defined in ([12], p. 244),”

4. Page 590, line 4 from above: Read “Conversely, suppose that  $\varphi * T \in \mathcal{D}_{L^p, \mu}$  for  $\varphi \in \mathcal{D}$ .” instead of “Conversely, suppose that  $\varphi * \in T\mathcal{D}_{L^p, \mu}$  for  $\varphi \in \mathcal{D}$ .”

**Bernstein-Sato-Polynome und Faltungsgruppen zu Differentialoperatoren, Zeitschrift Anal. Anw. 8 (1989) 407–423**

1. Page 411, second line: Read “mit  $f \in \mathcal{D}'(\mathbb{S}_0) \simeq \mathbb{C}^2$ ,  $f(1) = (2\pi)^\lambda e^{\pi i \lambda/2}$ ,  $f(-1) = (2\pi)^\lambda e^{-\pi i \lambda/2}$ .” instead of “mit  $f \in \mathcal{D}'(\mathbb{S}_0) \simeq \mathbb{C}^2$ ,  $f(1) = (2\pi)^\lambda e^{\pi i \lambda/2}$ ,  $f(-1) = f(1)$ .”

2. Page 411, line 9 from above: Read

$$“(-1)^{k/2} \frac{n+k}{k!} \int_{\Omega} (2\pi x \cdot \xi)^k (\psi(k+1) - (n+k)^{-1} - \log |2\pi x \cdot \xi|) dx \quad \text{für } k \in \mathbb{N} \text{ gerade,}”$$

instead of

$$“(-1)^{k/2} \frac{n+k}{k!} \int_{\Omega} (2\pi x \cdot \xi)^\lambda (\psi(k+1) - \log |2\pi x \cdot \xi|) dx \quad \text{für } k \in \mathbb{N} \text{ gerade,}”$$

3. Page 414, line 8 from above: Read “Das ergibt  $\text{Im}(\log P) = -Y(-P) \text{sign}(x_1)\pi$ .” instead of “Das ergibt  $\text{Im}(\log P) = -Y(-P) \text{sign}(x_1)i\pi$ .”

4. Page 414, line 14 from above: Read

$$“s_+(x) = Y\left(x_1 - \sqrt{x_2^2 + \cdots + x_n^2}\right) \sqrt{x_1^2 - x_2^2 - \cdots - x_n^2}”$$

instead of

$$“s_+(x) = Y(x_1^2 - x_2^2 - \cdots - x_n^2) \sqrt{x_1^2 - x_2^2 - \cdots - x_n^2}”$$

5. Page 415, line 5 from below: Read

$$“T_\lambda(c\xi) - c^k T_\lambda(\xi) = -(-1)^{k/2} \frac{n+k}{k!} c^k \log c \int_{P(x) \leq 1} (2\pi x \cdot \xi)^k dx =: P_1(\xi).”$$

instead of

$$“T_\lambda(c\xi) - c^k T_\lambda(\xi) = -(-1)^{k/2} \frac{n+k}{k!} \log c \int_{P(x) \leq 1} (2\pi x \cdot \xi)^k dx =: P_1(\xi).”$$

**On the multiplication and convolution of homogeneous distributions,  
Revista Colomb. Mat. 24 (1990) 183–197**

1. Page 189, second line: Read “is differentiable outside the origin.” instead of “is diferentiable outside the origin.”

2. Page 194, second-last line: Read “the growth of  $q_m(f, \epsilon)$  as  $\epsilon \rightarrow 0$ ” instead of “the growth of  $q(f, \epsilon)$  as  $\epsilon \rightarrow 0$ ”

**Some new fundamental solutions,  
joint work with N. Ortner, Math. Methods Appl. Sci. 12 (1990) 439–461**

1. Page 442, line 6 from above: Read

$$“\exists \sigma_0 \in \mathbb{R} : \forall \sigma > \sigma_0 : \forall \xi \in \mathbb{R}^n : P(2\pi\sigma N + i\xi) \neq 0”$$

instead of

$$“\exists \sigma_0 \in \mathbb{R} : \forall \sigma > \sigma_0 : \forall \xi \in \mathbb{R}^n : P(\sigma N + i\xi) \neq 0”$$

2. Page 442, line 13 from above: Read

“numbers such that  $P(2\pi\sigma N + i\xi) \neq 0$  for all  $\xi \in \mathbb{R}^n$  and  $\sigma > \sigma_0$ . If”

instead of

“numbers such that  $\sigma > \sigma_0$  and  $P(\sigma N + i\xi) \neq 0$  for all  $\xi \in \mathbb{R}^n$ . If”

3. Page 456, line 11 from above: Read “ $e = 2ib \frac{\sqrt{G\kappa E}}{|G\kappa - E|}$ .” instead of “ $e = 2ib \frac{\sqrt{G\kappa}}{|G\kappa - E|}$ .”

4. Page 459, line 18 from above: Read

$$“\partial_t^4 - \partial_t^2 \left[ \left( \frac{1}{\sigma_2} + \frac{1}{\sigma_3} \right) \partial_1^2 + \left( \frac{1}{\sigma_3} + \frac{1}{\sigma_1} \right) \partial_2^2 + \left( \frac{1}{\sigma_1} + \frac{1}{\sigma_2} \right) \partial_3^2 \right]”$$

instead of

$$“\partial_t^4 - \frac{1}{2} \partial_t^2 \left[ \left( \frac{1}{\sigma_2} + \frac{1}{\sigma_3} \right) \partial_1^2 + \left( \frac{1}{\sigma_3} + \frac{1}{\sigma_1} \right) \partial_2^2 + \left( \frac{1}{\sigma_1} + \frac{1}{\sigma_2} \right) \partial_3^2 \right]”$$

5. Page 459, last line: The given representation of  $E$  is not correct and should be deleted.

**On the fundamental matrix of the system describing linear thermodiffusion in the theory of thermal stresses, joint work with J. Gawinecki, Bull. Polish Acad. Sci. Tech. Sci. 39 (1991) 609–615**

1. Page 609, Summary, third line: Read “explicitly by elementary and error functions.” instead of “explicitly by the elementary and error functions.”

2. Page 611, second line from above: Read

$$B(\partial) := (\rho\partial_t^2 - \mu\Delta)I - (\lambda + \mu)\nabla \cdot \nabla^T, \quad C(\partial) := \begin{pmatrix} \partial_t - \kappa_1\Delta & \sigma\partial_t \\ \tau\partial_t & \partial_t - \kappa_2\Delta \end{pmatrix},$$

instead of

$$B(\partial) := (\rho\partial_t^2 - \mu\Delta)I - (\lambda + \mu)\nabla \cdot \nabla^T, \quad C(\partial) := \begin{pmatrix} \partial_t - \kappa_1\Delta & \sigma\partial_t \\ r\partial_t & \partial_t - \kappa_2\Delta \end{pmatrix},$$

3. Page 611, line 12 from below: Read

$$“ = (1 - \sigma\tau)(\rho\partial_t^2 - \mu\Delta)^2(\rho\partial_t^2 - (\lambda + 2\mu)\Delta)(\partial_t - \gamma_1\Delta)(\partial_t - \gamma_2\Delta), ”$$

instead of

$$“ = (1 - \sigma\tau)(\rho\partial_t^2 - \mu\Delta)^2(\rho\partial_t^2 - (\lambda + 2\mu)\Delta^2)(\partial_t - \gamma_1\Delta)(\partial_t - \gamma_2\Delta), ”$$

**On the quasiasymptotic expansion of the causal fundamental solution of hyperbolic operators and systems, Zeitschrift Anal. Anw. 10 (1991) 159–167**

1. Page 163, line 13 from above: Read “ $s = (x_0^2 - x_1^2 - \dots - x_{n-1}^2)_+^{1/2}$ ,  $\operatorname{Re} \zeta > \frac{n-1}{2}$ ,” instead of “ $s = (x_0^2 - x_1^2 - \dots - x_{n-1}^2)^{1/2}$ ,  $\operatorname{Re} \zeta > \frac{n-1}{2}$ ,”

2. Page 163, line 5 from below: Read

$$“\forall z \in T^C : P(-iz) \neq 0; C = \{y : y_0^2 > y_1^2 + \dots + y_{n-1}^2, y_0 > 0\}.”$$

instead of

$$“\forall z \in T^C : P(-iz) \neq 0; C = \{y : y_0^2 > y_1^2 + \dots + y_{n-1}^2\}.”$$

**On the fundamental solution of the operator of dynamic linear thermoelasticity, joint work with N. Ortner, J. Math. Anal. Appl. 170 (1992) 524–550**

1. Page 526, line 6 from above: Read “test function  $\phi$ ,” instead of “testfunction  $\phi$ ,”

2. Page 530, line 15 from above: Read “generalizes Proposition 1 of [40, p. 442] not” instead of “generalizes Theorem 1 of [40, p. 442] not”

3. Page 532, third line from above: Read “be chosen equal to 0. In particular,  $E_\epsilon \in \mathcal{S}'$  for  $\epsilon \geq 0$ .” instead of “be chosen equal to 0. In particular,  $E_\epsilon \in \mathcal{S}'$  for  $\epsilon > 0$ .”

4. Page 533, second-last line: Read “(cf. [1, 3.36, p. 135; 18,” instead of “(cf. [1, 3.36, p. 135]; 18,”

5. Page 534, line 17 from below: Read

$$“|s^{m-p}R(\xi + \theta/s - i\sigma N)| \geq k^{-1}(1 + |\xi| + |s|)^{-k},”$$

instead of

$$“|s^{m-p}R(\xi + \theta/s - i\sigma N)| \geq k(1 + |\xi| + |s|)^{-k},”$$

6. Page 534, line 7 from below: Read “accommodate” instead of “accomodate”.

7. Page 538, fourth line from above: Read

$$“E_\epsilon = e^{\sigma t} \mathcal{F}_{(\tau, \xi)}^{-1} \left( \frac{1}{p_\epsilon(\sigma + i\tau, |\xi|)} \right), \quad \sigma > \sigma_0,”$$

instead of

$$“E_\epsilon = e^{\sigma t} \mathcal{F}_{(\tau, \xi)}^{-1} \left( \frac{1}{p_\epsilon(\sigma + i\tau, |\xi|)} \right), \quad \sigma > \sigma_0,”$$

8. Page 544, last line: Read “thermoelastic operator” instead of “termoelastic operator”

9. Page 546, first line: Read “The evaluation of the” instead of “The evaluation of the”

10. Page 548, last line: Read “propagation of the discontinuities.” instead of “propagation of the shock waves.”

11. Page 549, reference 21: Read “Vandenhoeck und Ruprecht, Göttingen, 1979.” instead of “Vandenhoeck und Ruprecht, Göttigen, 1979.”

**Fundamental solutions of hyperbolic differential operators  
and the Poisson summation formula, joint work with N. Ortner,  
Integral Transforms and Special Functions 1 (1993) 183–196**

1. Page 184, line 12 from below: Read “fundamental solutions of hyperbolic operators on tori.” instead of “fundamental solutions of hyperbolic operator on tori.”

2. Page 187, lines 5 and 6 from below: Read “*in t does not vanish identically in  $\xi$ .*” instead of “*in t does not vanish identically  $\xi$ .*”

3. Page 189, formula (8): Read

$$“\int (1 + |\xi|^2)^\alpha |(\mathcal{F}_x F(t))(\xi)|^2 d\xi < \infty. \quad (8)”$$

instead of

$$“\int (1 + |\xi|^2)^\alpha |\mathcal{F}_x F(t))(\xi)|^2 d\xi < \infty. \quad (8)”$$

4. Page 191, line 12 from above: Read “Therefore, combining Propositions 1 and 4” instead of “Therefore, combining Proposition 1 and 4”

5. Page 191, line 14 from above: Read “ $Y(t - |x - k|)(t^2 - |x - k|^2)^{\frac{\alpha}{2} - \frac{n+1}{4}}$ ” instead of “ $Y(t - |x - k|)(t^2 - |x - k|^2)^{\frac{\alpha}{2} - \frac{n+1}{4}}$ ”

6. Page 195, reference 8: Read “M. Henkel and R.A. Weston, *Problem 92-11\**, SIAM Rev. **34**, No. 3, (1992), 496” instead of “P.B. Massell, *A Quick Way to Prove the Existence of Centers in 2-Dimensional Almost Linear Systems*, SIAM Rev., 34, No. 3, (1992), 492–497”

7. Page 196, reference 25: Read “Nouv. éd., Hermann” instead of “Nouvéd., Hermann”

**Feynman integral formulae and fundamental solutions of  
decomposable evolution operators, joint work with N. Ortner,  
Proc. Steklov Inst. 203 (1995) 305–322**

1. Page 307, line 14: Read “The modified Feynman formula” instead of “Then modified Feynman formula”

2. Page 309, fourth and fifth line: Read “ $t > -c$ ” instead of “ $t > -d$ ”

3. Page 312, third formula line from below: Read

$$\left( \begin{array}{c} 0 \\ 0 \end{array} \right), \left( \begin{array}{c} A_{j_1}^\downarrow \\ d_{j_1} \end{array} \right), \dots, \left( \begin{array}{c} A_{j_{l+1}}^\downarrow \\ d_{j_{l+1}} \end{array} \right) \text{ instead of } \left( \begin{array}{c} 0 \\ 0 \end{array} \right), \left( \begin{array}{c} A_{j_1}^\downarrow \\ d_{j_1} \end{array} \right), \dots, \left( \begin{array}{c} A_{j_m}^\downarrow \\ d_{j_m} \end{array} \right)$$

4. Page 315, Prop. 5, first line: Read “ $A_k^\downarrow \in \mathbb{R}^n$ ,  $d_k \in \mathbb{C}$ ,  $r_k \in \mathbb{N}$ ” instead of “ $A_k^\downarrow \in \mathbb{R}$ ,  $d_k \in \mathbb{C}$ ,  $r_k \in \mathbb{N}$ ”

5. Page 315, Prop. 5, third line: Read “Furthermore, assume that  $A_{j_1}^\downarrow, \dots, A_{j_n}^\downarrow$  are linearly independent in  $\mathbb{R}^n$  and” instead of “Furthermore, assume that”

6. Page 315, fourth line from below: Read

$$c_j := |\det(A_{j_1}^\downarrow, \dots, A_{j_n}^\downarrow)|^{-1} \prod_{\substack{k=1 \\ k \notin \{j_1, \dots, j_n\}}}^m \frac{[-\det(A_{j_1}^\downarrow, \dots, A_{j_n}^\downarrow)]^{r_k}}{\det^{r_k} \begin{pmatrix} d_k & d_{j_1} & \dots & d_{j_n} \\ A_k^\downarrow & A_{j_1}^\downarrow & \dots & A_{j_n}^\downarrow \end{pmatrix}},$$

instead of

$$c_j := |\det(A_{j_1}^\downarrow, \dots, A_{j_n}^\downarrow)|^{-1} \prod_{\substack{k=m \\ k \notin \{j_1, \dots, j_n\}}}^m \frac{[-\det(A_{j_1}^\downarrow, \dots, A_{j_n}^\downarrow)]^{r_k}}{\det^{r_k} \begin{pmatrix} d_k & d_{j_1} & \dots & d_{j_n} \\ A_k^\downarrow & A_{j_1}^\downarrow & \dots & A_{j_n}^\downarrow \end{pmatrix}},$$

7. Page 316, line 4 from above: Read “ $e_j$ ” instead of “ $e_{j_j}$ ”

8. Page 317, line 13 from above: Read “indices  $j_1, \dots, j_{n-1}, k \in \{1, \dots, m\}$ . Define ...” instead of “indices  $j_1, \dots, j_{N-1}, k \in \{1, \dots, m\}$ . Define ...”

9. Page 318, line 9 from below: Read “is written there in the form of a simple integral” instead of “is written there in the form if a simple integral”

10. Page 320, second line from above: Read

$$“c_{ij} := (a_i - a_j)^{m-3} \prod_{\substack{k=1 \\ k \neq i, k \neq j}}^m \det^{-1} \begin{pmatrix} a_i - a_k & a_j - a_i \\ d_i - d_k & d_j - d_i \end{pmatrix} = -c_{ji}.”$$

instead of

$$“e_{ij} := (a_i - a_j)^{m-3} \prod_{\substack{k=1 \\ k \neq i, k \neq j}}^m \det^{-1} \begin{pmatrix} a_i - a_k & a_j - a_i \\ d_i - d_k & d_j - d_i \end{pmatrix} = -c_{ji}.”$$

11. Page 322, reference 15: Read “C. A. Brebbia” instead of “C. A. Brabbia”

**On the evaluation of one-loop Feynman amplitudes in Euclidean quantum field theory, joint work with N. Ortner,  
Ann. Inst. H. Poincaré, Phys. Théor. 62 (1995) 81–110**

1. Page 102, second line of Prop. 6: Read “ $\langle Cx, x \rangle > 0$  for  $x \in \mathbb{R}_+^3 \setminus 0$ . Then” instead of “ $\langle Cx, x \rangle > 0$  for  $x \in \mathbb{R}_+^3 \searrow 0$ . Then”

2. Page 102, last line: Read

$$“\operatorname{arccot} \left( \frac{c_{11}c_{23} - c_{12}c_{13}}{\sqrt{c_{11}}\sqrt{\det C}} \right),” \quad \text{instead of} \quad “\operatorname{arccot} \left( \frac{c_{11}c_{23} - c_{12}c_{13}}{\sqrt{\det C}} \right),”$$

3. Page 109, last formula line: Read

$$“V = \frac{1}{2} (\operatorname{Cl}_2(2\alpha) + \operatorname{Cl}_2(2\beta) + \operatorname{Cl}_2(2\gamma)),”$$

instead of

$$“V = \frac{1}{2} (\operatorname{Cl}_2(\alpha) + \operatorname{Cl}_2(\beta) + \operatorname{Cl}_2(\gamma)),”$$

**A short proof of the Malgrange–Ehrenpreis theorem,  
(joint work with N. Ortner), Functional Analysis, Proc. 1st Int. Workshop,  
ed. by S. Dierolf, S. Dineen, P. Domański, 343–352, de Gruyter, Berlin, 1996**

1. Page 344, second-last line: Read

$$“\exists C > 0 : \forall \phi \in \mathcal{D} : |\phi(0)| \leq C \left\| \mathcal{F}_{\xi \rightarrow x}^{-1} \left( \cosh(|\xi|) P(-\partial) \phi(\xi) \right) \right\|_{L^1}”$$

instead of

$$“\exists C > 0 : \forall \phi \in \mathcal{D} : |\phi(0)| \leq \left\| \mathcal{F}_{\xi \rightarrow x}^{-1} \left( \cosh(|\xi|) P(-\partial) \phi(\xi) \right) \right\|_{L^1}”$$

2. Page 345, fifth line from above: Read “led to proofs” instead of “lead to proofs”

3. Page 346, third line from below: Read

$$“ = \frac{1}{P_m(\eta)} \int_{\mathbb{T}^1} \lambda^m e^{\lambda \eta x} \overline{P(-\partial + \lambda \eta)} \delta \frac{d\lambda}{2\pi i \lambda} .”$$

instead of

$$“ = \frac{1}{P_m(\eta)} \int_{\mathbb{T}^1} \lambda^m e^{\lambda \eta x} \overline{P(\partial + \lambda \eta)} \delta \frac{d\lambda}{2\pi i \lambda} .”$$

4. Page 346, last line: Read

$$“ \overline{P(-\partial + \lambda \eta)} \delta = \overline{\lambda^m P_m(\eta)} \delta + \sum_{k=0}^{m-1} \overline{\lambda^k} Q_k(\partial) \delta ,”$$

instead of

$$“ \overline{P(\partial + \lambda \eta)} \delta = \overline{\lambda^m P_m(\eta)} \delta + \sum_{k=0}^{m-1} \overline{\lambda^k} Q_k(\partial) \delta ,”$$

5. Page 347, line 11 from above: Read “fix  $\eta \in \mathbb{R}^2 \setminus \{0\}$ , and set” instead of “fix  $\eta \in \mathbb{R}^2$ , and set”

6. Page 351, second line from above: Read

$$“ \overline{P(\eta)} = \sum_{|\alpha|=m} \frac{\eta^\alpha}{\alpha!} \overline{P^{(\alpha)}}(0) ,”$$

instead of

$$“ \overline{P(\eta)} = \sum_{|\alpha|=m} \frac{\eta^\alpha}{\alpha!} \overline{P^{(\alpha)}} ,”$$

7. Page 351, reference [14]: Read “Proc. Amer. Math. Soc. 122 (1994), 455–461.” instead of “Proc. Amer. Math. Soc., to appear.”

8. Page 352, reference [16]: Read “Ortner, N., Wagner, P., A survey on explicit representation formulae for fundamental solutions of linear partial differential operators, Acta Appl. Math. 47 (1997), 101–124.” instead of “Ortner, N., Wagner, P., A survey on explicit representation formulae for fundamental solutions, preprint, Innsbruck 1994.”

**Solution of the initial-boundary value problem for the simply supported semi-infinite Timoshenko beam, joint work with N. Ortner, Journal of Elasticity 42 (1996) 217–241**

1. Page 229, line 8 from below: Read

$$\cosh(\alpha - \beta) - e^{-\alpha} \cosh(\beta) = \sinh(\alpha - \beta) + e^{-\alpha} \sinh(\beta) = e^{-\beta} \sinh(\alpha),$$

instead of

$$\cosh(\alpha - \beta) - e^{-\alpha} \cosh(\beta) = \sinh(\alpha - \beta) - e^{-\alpha} \sinh(\beta) = e^{-\beta} \sinh(\alpha),$$



**Evaluation of non-relativistic one-loop Feynman integrals  
by distributional methods, J. Math. Physics 39 (1998) 2428–2436**

Page 2431, line 4 from above: Read “discontinuous at the ball  $\{(0, x) : |x|^2 \leq a\}$  only.” instead of “discontinuous at the ball  $\{(0, x) : |x| \leq a\}$  only.”

**Fundamental solutions of real homogeneous cubic operators  
of principal type in three dimensions, Acta Math. 182 (1999) 283–300**

1. Page 287, line 11 from below: Read “ $\beta_3(z) = 6a^2z^3 + 9az^2 + 3z$ ” instead of “ $\beta_3(z) = 6a^2z^3 + 9az + 3z$ ”

2. Page 290, line 7 from below: Read “solutions  $[\xi] \in \mathbf{P}(\mathbf{R}^3)$ .” instead of “solutions  $[\xi] \in P(\mathbf{R}^3)$ .”

3. Page 293, line 2 from below: Read “more symmetrically as  $E_a(x) = \text{constant} \pm (1/(6\pi)) \text{Im} \int_{[\gamma(x)]} \Omega$ .” instead of “more symmetrically as  $E_a(x) = \text{constant} \pm (1/6\pi) \int_{[\gamma(x)]} \Omega$ .”

**On the explicit calculation of fundamental solutions,  
J. Math. Anal. Appl. 297 (2004) 404–418**

1. Page 406, line 8 from below: Read

$$“E(x) = -\frac{i \text{sign}(x_2)}{2\pi} \sum_{k=1}^3 \frac{\zeta_k(x)_3 P(\zeta_k(x))^{\text{ad}}}{x_2 \frac{\partial \det P}{\partial \xi_1}(\zeta_k(x)) - x_1 \frac{\partial \det P}{\partial \xi_2}(\zeta_k(x))},”$$

instead of

$$“E(x) = -\frac{i \text{sign}(x_2)}{2\pi} \sum_{k=1}^3 \frac{|\zeta_k(x)|^2 P(\zeta_k(x))^{\text{ad}}}{x_2 \frac{\partial \det P}{\partial \xi_1}(\zeta_k(x)) - x_1 \frac{\partial \det P}{\partial \xi_2}(\zeta_k(x))},”$$

2. Page 408, last line: Read

$$“= \frac{1}{P_m(\eta)} \int_{\lambda \in \mathbb{C}, |\lambda|=1} \lambda^m e^{\lambda \eta x} \overline{P(-\partial + \lambda \eta)} \delta \frac{d\lambda}{2\pi i \lambda},”$$

instead of

$$“= \frac{1}{P_m(\eta)} \int_{\lambda \in \mathbb{C}, |\lambda|=1} \lambda^m e^{\lambda \eta x} \overline{P(\partial + \lambda \eta)} \delta \frac{d\lambda}{2\pi i \lambda},”$$

3. Page 418, reference [40]: Read “Mat. Sb. 17 (1945) 289–370.” instead of “Mat. Sb. 17 (1945) 283–370.”

**Fundamental matrices of homogeneous hyperbolic systems.  
Applications to crystal optics, elastodynamics and piezoelectromagnetism,  
joint work with N. Ortner, Z. Angew. Math. Mech. 84 (2004) 314–346**

1. Page 317, line 10 from above: Read “[31, (11), p. 363]” instead of “[31, (119), p. 363]”

2. Page 324, next to last line: Read

$$“(-1)^{n/2}\pi\delta^{(n-m-1)}(t) \quad : m < n, \quad n \text{ even},”$$

instead of

$$“(-1)^{n/2}(n-m-1)!\pi\delta^{(n-m-1)}(t) \quad : m < n, \quad n \text{ even},”$$

**The Herglotz formula and fundamental solutions of hyperbolic cubic operators in  $\mathbf{R}^4$ , Int. Transf. Special Functions 17 (2006) 307–314**

Page 311, line 4 from below: Read “Let  $K =$ ” instead of “Then  $\text{supp } E =$ ”

**A mathematically rigorous formulation of the pseudopotential method, joint work with F. Stampfer, J. Math. Anal. Appl. 342 (2008) 202–212**

1. Page 205, last line: Read

$$“\Delta_3 \text{vp}(r^\lambda Y_{lm}(\Omega)) = \frac{\lambda + l + 1}{(\lambda + l - 2)(\lambda + l - 4) \cdots (\lambda - l + 2)} Y_{lm}(\partial) r^{\lambda+l-2}.”$$

instead of

$$“\Delta_3 \text{vp}(r^\lambda Y_{lm}(\Omega)) = \frac{\lambda + l + 1}{(\lambda + l - 2)(\lambda + l - 4) \cdots (\lambda - l + 2)} \text{vp}(Y_{lm}(\partial) r^{\lambda+l-2}).”$$

2. Page 208, second-last line: Read

$$“\langle \phi, S \rangle = \lim_{\epsilon \searrow 0} \frac{1}{\epsilon} \int_0^\epsilon \chi(r) r^{-l} dr = \lim_{r \searrow 0} r^{-l} \chi(r).”$$

instead of

$$“\langle \phi, S \rangle = \lim_{\epsilon \searrow 0} \left\langle \phi, \frac{1}{\epsilon} \int_0^\epsilon \chi(r) r^{-l} dr \right\rangle = \lim_{\epsilon \searrow 0} r^{-l} \chi(r).”$$

**The fundamental matrix of the system of linear elastodynamics in hexagonal media. Solution to the problem of conical refraction, joint work with N. Ortner, IMA J. Appl. Math. 73 (2008) 412–447**

1. Page 426, fourth line from below: Read “and the surface  $R(1, \xi) = 0$  is singular along the circle  $\xi_3 = 0$ ,  $\rho = 1/\sqrt{a_1}$ .” instead of “and the surface  $R(1, \xi) = 0$  is singular along the circle  $\xi_3 = 0$ ,  $\rho = \sqrt{a_1}$ .”

2. Page 427, third line from below: Read

$$“Q_\eta(\partial) = 2\tau^2(\partial_t \mp \sqrt{a_2} \partial_3) \cdot \left[ 4(\partial_t \mp \sqrt{a_2} \partial_3)^2 - \frac{a_3^2}{a_2} \Delta_2 \right].”$$

instead of

$$“Q_\eta(\partial) = 4\tau^2(\partial_t \mp \sqrt{a_2} \partial_3) \cdot [4(\partial_t \mp \sqrt{a_2} \partial_3)^2 - \frac{a_3^2}{a_2} \Delta_2].”$$

3. Page 427, last line: Read

$$“M := \bigcup_{\pm} \Gamma(Q_{(1,0,0,\pm 1/\sqrt{a_2})})^* = \left\{ (t, x) \in \mathbb{R}^4; |x_3| = t\sqrt{a_2}, |x'| \leq \frac{|a_3|t}{2\sqrt{a_2}} \right\}”$$

instead of

$$“M := \bigcup_{\pm} \Gamma(Q_{(1,0,0,\pm 1/\sqrt{a_2})})^* = \left\{ (t, x) \in \mathbb{R}^4; |x_3| = t\sqrt{a_2}, |x'| \leq \frac{a_3 t}{2\sqrt{a_2}} \right\}”$$

4. Page 431, third line: Read

$$“\frac{Y(t)}{8\pi\sqrt{a_5}} \tilde{\nabla} \frac{\tilde{x}^T}{|x'|^2} Y\left(\frac{|x'|^2}{a_4} + \frac{x_3^2}{a_5} - t^2\right) \cdot \left[\text{sign}\left(t + \frac{x_3}{\sqrt{a_5}}\right) + \text{sign}\left(t - \frac{x_3}{\sqrt{a_5}}\right)\right]”$$

instead of

$$“\frac{Y(t)}{8\pi\sqrt{a_5}} \tilde{\nabla} \frac{\tilde{x}^T}{|x'|^2} Y\left(\sqrt{\frac{|x'|^2}{a_4} + \frac{x_3^2}{a_5}} - t^2\right) \cdot \left[\text{sign}\left(t + \frac{x_3}{\sqrt{a_5}}\right) + \text{sign}\left(t - \frac{x_3}{\sqrt{a_5}}\right)\right]”$$

5. Page 434, line 14 from below: Read “This happens iff  $D(0) = 0$ , i.e. iff  $a_1 = a_5$ . Then” instead of “This happens iff  $D(s) = 0$ , i.e. iff  $a_1 = a_5$ . Then”

**A new constructive proof of the Malgrange–Ehrenpreis theorem,  
American Math. Monthly 116 (2009) 457–462**

Page 461, line 14: Read “that  $\eta x_k$  are pairwise different for  $k = 1, \dots, r$ , and  $P_{1,m}(\eta) \neq 0$ , then there exist” instead of “that  $\eta x_k$  are pairwise different for  $k = 1, \dots, r$ , then there exist”

**Distributions supported by hypersurfaces,  
Applicable Analysis 89 (2010) 1183–1199**

1. Page 1184, line 9 from below: Read “ $\mathcal{O}(T_x^*X)$  the (two-element) set of orientations” instead of “ $\mathcal{O}(T_x X)$  the (two-element) set of orientations”

2. Page 1186, line 4 from above: Read “where  $\det g := \det((g_{ij})_{i,j=1,\dots,n})$ ” instead of “where  $\det g := \det((g_{ij})_{i,j=1,\dots,n})$ ”

3. Page 1186, line 11 and 12 from above: Read “unique representation as  $T|_U = \sum_j T_j e_j$  with  $T_j \in \mathcal{D}'(U)$ , and  $\langle \phi, T \rangle = \sum_j \langle \phi_j, T_j \rangle$  if  $\phi = \sum_j \phi_j e_j^* \in \mathcal{D}(U, E^*)$ ” instead of “unique representation as  $T = \sum_j T_j e_j$  with  $T_j \in \mathcal{D}'(X)$ , and  $\langle \phi, T \rangle = \sum_j \langle \phi_j, T_j \rangle$  if  $\phi = \sum_j \phi_j e_j^* \in \mathcal{D}(X, E^*)$ ”

4. Page 1191, line 6 from below: Read

$$\sum_{j=0}^k \binom{k}{j} \langle \text{tr}((-\nabla_\nu)^{k-j} \phi \otimes (-\nabla_\nu)^j \psi) |_{M, T} \rangle$$

instead of

$$\sum_{j=0}^k \binom{k}{j} \langle \text{tr}((-\nabla_\nu)^{k-j} \phi \otimes (-\nabla_\nu)^j \psi) |_{M, T} \rangle$$

5. Page 1192, line 4 from below: Read “ $\nabla_\nu dx^1 = -\Gamma_{1k}^1 dx^k = 0$ ” instead of “ $\nabla_\nu dx^1 = \Gamma_{1k}^1 dx^k = 0$ ”

6. Page 1194, line 12 from above: Read “Let us next give a formula for  $((-\nabla_\nu)^j \nabla \psi) |_{M, j \in \mathbf{N}}$ ” instead of “Let us next give a formula for  $((-\nabla_\nu)^j \nabla \psi) |_{M, j \in \mathbf{N}}$ ”

7. Page 1198, reference [7]: Read “L. Seeley, *Distributions on Surfaces*, Report TW 78, Math. Centre, Amsterdam, 1962” instead of “L. Seeley, *Homogeneous Distributions*, Report TW 88, Mathematical, Centrum Amsterdam, 1962”

8. Page 1198, reference [9]: Read “*Variétés Différentiables*, 3ème éd., Hermann” instead of “*Variétés Différentiables*, 3é me éd, Hermann”

**M. Riesz’ kernels as boundary values of conjugate Poisson kernels,  
joint work with M. Guzmán-Partida and N. Ortner,  
Bull. Sci. Math. 135 (2011) 291–302**

Page 295, line 16 from below: Read

$$“S_k \longrightarrow S, \quad T_k \longrightarrow T \quad \text{in } \mathcal{D}'(\mathbb{R}^n) \text{ for } k \longrightarrow \infty, ”$$

instead of

$$“S_k \longrightarrow S, \quad T_k \longmapsto T \quad \text{in } \mathcal{D}'(\mathbb{R}^n) \text{ for } k \longrightarrow \infty, ”$$

**Distribution-Valued Analytic Functions – Theory and Applications,  
joint work with N. Ortner, tredition, Hamburg 2013**

1. Page 59, lines 9, 10 from above: Read “cf. Schwartz [5], Ch. IV, § 5, p. 113-115.” instead of “cf. Schwartz [1], Ch. IV, § 5, p. 113-115.”

2. Page 68, middle: Read

$$“\frac{\Gamma(n-\lambda)}{(2\pi)^n} \cos\left(\frac{(n-\lambda)\pi}{2}\right) \frac{2\pi^{(n-1)/2}}{\Gamma\left(\frac{n-1}{2}\right)} \int_0^\pi (|x| \cdot |\cos \theta|)^{\lambda-n} \sin^{n-2} \theta \, d\theta”$$

instead of

$$“\frac{\Gamma(n-\lambda)}{(2\pi)^n} \cos\left(\frac{(n-\lambda)\pi}{2}\right) \frac{2\pi^{(n-1)/2}}{\Gamma\left(\frac{n-1}{2}\right)} \int_0^\pi (|x| \cos \theta)^{\lambda-n} \sin^{n-2} \theta \, d\theta”$$

3. Page 89, lines 3, 4 from below: Read “in Schwartz [5], Ch. VI, § 8:” instead of “in Schwartz [4], Ch. VI, § 8:”

**Division problem for spatially periodic distributions,  
joint work with A. Sasane, J. Math. Anal. Appl. 408 (2013) 70–75**

1. Page 71, Ex. 1.1: Read “ $2\xi_1 - 1 + c\xi_2$ ” instead of “ $\xi_1 + c\xi_2$ ” in lines 4, 5, 7 and 9. (Note that the polynomial  $P(\xi) = 2\xi_1 - 1 + c\xi_2$  does not vanish for  $\xi \in \mathbb{Z}^2$  whereas  $\xi_1 + c\xi_2$  vanishes at the origin.)

2. Page 71, Ex. 1.1, line 8: Read “and in particular, with  $\xi_1 = \frac{1}{2}(1 - p_k)$ , and  $\xi_2 = q_k$ ,  $k \in \mathbb{N}$ ,” instead of “and in particular, with  $\xi_1 = -p_k$ , and  $\xi_2 = q_k$ ,  $k \in \mathbb{N}$ ,”

3. Page 71, Ex. 1.2, line 6 from below: Read “Then, for  $\xi \neq 0$ , the constant  $S_\xi = 1/(\xi_1 + c\xi_2)$  is the only solution . . . ” instead of “Then the constant  $S_\xi = 1/(\xi_1 + c\xi_2)$  is the only solution . . . ”

4. Page 71, Ex. 1.2, second line from below: Read “ $S_\xi = 1/(\xi_1 + c\xi_2)$  for  $\xi \neq 0$  and  $S_0(t) = t$ ” instead of “ $(S_\xi) = \left(\frac{1}{\xi_1 + c\xi_2}\right)$ ”

**Fundamental Solutions of Linear Partial Differential Operators,  
joint work with N. Ortner, Springer, Berlin 2015**

1. Page vii, third line from below: Read “leads to (an easy case of) a *distribution*” instead of “leads to (an easy case) of a *distribution*”

2. Page 66, line 5 from below: Read “ $\mathcal{D}_{L^p} = \mathcal{D}_{L^p}(\mathbf{R}^n) = \dots$ ” instead of “ $D_{L^p} = D_{L^p}(\mathbf{R}^n) = \dots$ ”

3. Page 77, line 11 from above: Read “induced by a moving point charge in  $\mathbf{R}^3$ .” instead of “induced by a moving point charge in  $\mathbf{R}^3$ .”

4. Page 98, first line: Read “we conclude that  $\mathcal{H} : \mathcal{S}'_r(\mathbf{R}^1) \xrightarrow{\sim} \mathcal{S}'_r(\mathbf{R}^1)$  is the transpose” instead of “we conclude that  $\mathcal{H} : \mathcal{S}'_r(\mathbf{R}^1) \xrightarrow{\sim} \mathcal{S}'_r(\mathbf{R}^1)$  is the transpose” and similarly in the third line.

5. Page 111, lines 9, 16, 18: Read

$$“\Phi : \mathcal{D}'(\mathbf{T}^n) \xrightarrow{\sim} \mathcal{D}'_p(\mathbf{R}^n) : S \mapsto (\phi \mapsto \langle \sum_{k \in \mathbf{Z}^n} \tau_k \phi, S \rangle)”$$

instead of

$$“\Phi : \mathcal{D}'(\mathbf{T}^n) \xrightarrow{\sim} \mathcal{D}'_p(\mathbf{R}^n) : S \mapsto (\phi \mapsto \langle \sum_{k \in \mathbf{Z}^n} \tau_k \phi, S \rangle)”$$

and similarly in lines 16 and 18.

6. Page 280, lines 13 and 14: Read “... then  $L_1(P) = \{1, -1\}$ , but  $L(P) \supset \{\pm 1, \omega^T \cdot \eta; \omega \in \mathbf{S}^{n-1}, \omega_1 = 0\}$ .” instead of “... then  $L_1(P) = \{1, -1\}$ , but  $L(P) = \{\pm 1, \omega^T \cdot \eta; \omega \in \mathbf{S}^{n-1}, \omega_1 = 0\}$ .”

7. Page 336, line 11: Read “at least if  $\lambda \notin -n - \mathbf{N}_0$ , see also . . . ” instead of “at least if  $\lambda \in -n - \mathbf{N}_0$ , see also . . . ”

8. Page 363, line 8 from below: Read

$$\text{“} = -\frac{1}{8\pi\sqrt{A}} \int_{z_1}^{\infty} \frac{dz}{\sqrt{z^3 - 2pz^2 - 4A^{-4}(1-a^2)[x_1^8 - 4ax_1^6 - 10x_1^4 - 4ax_1^2 + 1]z + q^2}} \text{”}$$

instead of

$$\text{“} = -\frac{1}{8\pi\sqrt{A}} \int_{z_1}^{\infty} \frac{dz}{z^3 - 2pz^2 - 4A^{-4}(1-a^2)[x_1^8 - 4ax_1^6 - 10x_1^4 - 4ax_1^2 + 1]z + q^2} \text{”}$$

9. Page 365, line 4 from below: Read “is an elliptic operator with a real-valued symmetric matrix  $C$  fulfilling ...” instead of “with a real-valued symmetric matrix  $C$  fulfilling ...”

10. Page 387, reference 102: Read “Proceedings of International Congress of Mathematicians” instead of “Proceedings of International Congress on Mathematicians”

**On the Weyl transform for rotationally invariant symbols,  
joint work with N. Ortner, J. Pseudo-Differ. Oper. Appl. 10 (2019) 769–791**

1. Page 769, third line from below: Read “to the space  $\mathcal{D}'_{L^1, -1}(\mathbb{R}^1)$  of weighted integrable distributions” instead of “to the space  $\mathcal{D}'_{L^1, -1}(\mathbb{R}^2)$  of weighted integrable distributions”

2. Page 775, lines 8 and 10: Read “ $e^{i \exp(2x)}$ ” instead of “ $e^i \exp(2x)$ ”

3. Page 785, line 13: Read

$$\text{“} T(t) = \frac{1}{2\pi} \int_0^{\infty} \chi(s) s^z e^{ih(s)} ds \sim \frac{s_0^z}{2\pi} e^{ih(s_0)} \sqrt{\frac{2\pi i}{h''(s_0)}} \text{”}$$

instead of

$$\text{“} T(t) = \frac{1}{2\pi} \int_0^{\infty} \chi(s) s^z e^{ih(s)} ds \sim \frac{1}{2\pi} e^{ih(s_0)} \sqrt{\frac{2\pi i}{h''(s_0)}} \text{”}$$

4. Page 785, line 5 from below: Read “ $(\mathcal{F}S')(2j) = 2ij(\mathcal{F}S)(2j)$ .” instead of “ $(\mathcal{F}S')(2j) = 2ij \mathcal{F}S$ .”

**On Green’s functions in generalized axially symmetric potential theory,  
joint work with N. Ortner, Applicable Analysis 99 (2020) 1171–1180**

1. Page 1172, line 23: Read “... and  $\mathcal{S}'(\mathbb{R}^n)$  of distribu-” instead of “... and  $\mathcal{S}'(\mathbb{R}^n)$  of distribu-”

2. Page 1172, second line from below, and page 1173, first line from above: Read “ $E \in \mathcal{S}'(\mathbb{R}^n)$  is called ...” instead of “ $E \in \mathcal{S}'(\mathbb{R}^n)$  is called ...”

3. Page 1173, line 14, Equ. (2): Read

$$\text{“} (\partial_t^2 + \frac{1+2\alpha}{t} \partial_t - |x|^2)U = 0 \quad \text{in } H. \text{”}$$

instead of

$$“(\partial_t^2 + \frac{1+2\alpha}{t} \partial_t - |x|^2)U = 0 \quad \text{in } H.”$$

4. Page 1179, reference [8]: Read

“[8] Ortner N, Wagner P. On the Fourier transform of rotationally invariant distributions. Boll Un Mat Ital 2019;12:469–484.”

instead of

“[8] Ortner N, Wagner P. On the Fourier transform of rotationally invariant distributions by analytic continuation. Applications. Innsbruck, 2017.”

**On the boundedness of the Weyl transform for homogeneous distributions on  $\mathbb{R}^2$ , J. Pseudo-Differ. Oper. Appl. 11 (2020) 657–674**

1. Page 659, line 8: Read “this being extended to  $\mathcal{S}'$  by continuity.” instead of “this being extended to  $\mathcal{S}'$  by continuity.”

2. Page 667, third line from below: Read “... if the real part  $\mu$  of  $\lambda$  lies ...” instead of “... if the real part of  $\lambda$  lies ...”

3. Page 668, Proposition 3: Read

**Proposition 3** *Let  $\sigma \in \mathcal{S}'(\mathbb{R}^2)$  be homogeneous on  $\mathbb{R}^2$  of degree  $\lambda \in \mathbb{C}$  and such that  $W_\sigma$  is bounded on  $L^2(\mathbb{R})$ . Then  $-2 \leq \operatorname{Re} \lambda \leq 0$  and  $\sigma = T + F \cdot r^\lambda$  with  $F \in \mathcal{H}^{(1/4+\mu/2)}(\mathbb{S}^1)$ ,  $\mu = \operatorname{Re} \lambda$ , and  $T = c\delta$ ,  $c \in \mathbb{C}$ , for  $\lambda = -2$  and else  $T = 0$ .*

instead of

**Proposition 3** *Let  $\sigma \in \mathcal{S}'(\mathbb{R}^2)$  be homogeneous on  $\mathbb{R}^2$  of degree  $\lambda \in \mathbb{C}$  and such that  $W_\sigma$  is bounded on  $L^2(\mathbb{R})$ . Then  $-2 \leq \operatorname{Re} \lambda \leq 0$  and [either  $\sigma$  is a multiple of  $\delta$  or  $\sigma = F \cdot r^\lambda$  with  $F \in \mathcal{H}^{(1/4+\mu/2)}(\mathbb{S}^1)$  for  $\mu = \operatorname{Re} \lambda$ .]*

**The distributional solutions of Kummer’s differential equation, joint work with N. Ortner, J. Math. Anal. Appl. 517 (2023) 126587**

1. Page 4, line 8: Read “Alternatively, for  $\lambda \in \mathbb{C} \setminus \mathbb{N}_0$ , the solution space ...” instead of “Alternatively, the solution space ...”