p. 2 line 3
Delete: immiscible

p. 6 line 7
Paste: Some coefficients at the nonlinear terms may vanish even in a two-layer fluid with the surface tension between the layers too (Giniyatullin et al., 2014; Kurkina et al., 2015). After: This feature is common for several wave classes in stratified environments.

p. 27 line 19
Paste: Giniyatullin A.R., Kurkin A.A., Kurkina O.E., Stepanyants Y.A. Generalised Korteweg–de Vries equation for internal waves in two-layer fluid. Fundamental and Applied Hydrophysics, 2014, v. 7, n. 4 (in Russian).

p. 28 line 29
Paste: Kurkina O., Singh N., Stepanyants Y. Structure of internal solitary waves in two-layer fluid at near-critical situation. Comm. Nonlin. Sci. Num. Simulation, 2015, v. 22, n. 5, 1235–1242.

p. 26 line 16
Delete: The analytical expressions for the coefficients are available on request from Oxana Kurkina (oksana.kurkina@mail.ru)

p. 25 line 15
Correct:

$$\alpha_1^{\pm} = \frac{1}{2(1-l_2)^2 H_3^2 c^{\pm} l_1^2 \left(1 - 4rq^{\pm 2}(1-l_2) l_1 (l_2 - l_1)\right)}$$

$$\times \Big(\alpha^{\pm 2} H_3^2 l_1^2 (1-l_2)^2 \left(-12rq^{\pm 2} l_1 (1-l_2)(l_2 - l_1) - 1\right) + \alpha^{\pm} H_3 c^{\pm} (1-l_2) l_1 \Big(4rq^{\pm 2}(1-l_2)^2 (l_2 - l_1) l_1 \left(-20 l_1 q^{\pm} + 11\right) +$$

$$+ 16 q^{\pm 2} l_1^2 (1-l_1)(l_2 - l_1) + 2q^{\pm} l_1 (l_2 - l_1) + 5(1 - 2l_2)\Big) + 12rq^{\pm 2} c^{\pm 2} (1-l_2)^3 (l_2 - l_1) l_1 \left(-10 q^{\pm 2} l_1^2 + 15 q^{\pm} l_1 - 3\right) +$$

$$+ 12 q^{\pm 3} c^{\pm 2} l_1^3 \left(-4 l_1^3 + 3 l_1^2 (3 + l_2) + l_1 \left((1-l_2)^2 + 6(1-l_2) - 12\right) + (5 - l_2) l_2\right) -$$

$$- 18 q^{\pm 2} c^{\pm 2} l_1^2 \left(2 l_1^2 (3 - l_2) + l_1 \left(2(1-l_2)^2 + (1-l_2) - 8\right) + l_2 (5 - l_2)\right) + 18 q^{\pm} c^{\pm 2} l_1 (1 + l_2)(l_2 - l_1) -$$

$$- 6 c^{\pm 2} \left(3(1-l_2)^2 - 3(1-l_2) + 1\right)\Big)$$

Add:

$$\gamma_1^{\pm}=\frac{1}{12c^{\pm}H_3l_1(1-l_2)\big(1-4rq^{\pm 2}l_1(1-l_2)(l_2-l_1)\big)}\times\Big(\big(144rq^{\pm}H_3l_1^2(1-l_2)^2(l_1-l_2)-12H_3l_1(1-l_2)\big)\beta+$$

$$+\Big(\big(8H_3^3l_1^2c^{\pm}(1-l_2)^2(l_1^3-l_2^3)+24H_3^3l_1^3c^{\pm}(1-l_2)^2(l_1-l_2)\big)rq^{\pm}-2H_3^3l_1c^{\pm}(1-l_2)(l_1^2-l_2^2)\Big)\alpha+$$

$$+\Big(384l_1^2c^{\pm}q^{\pm 3}r(1-l_2)^2(l_1-l_2)-240l_1c^{\pm}q^{\pm 2}r(1-l_2)^2(l_1-l_2)+48l_1^2c^{\pm}q^{\pm 2}\big(l_1^2-l_1(1+l_2)+l_2\big)+$$

$$+24c^{\pm}\big(q^{\pm}l_1(l_2-l_1)+1+2l_2\big)\Big)\beta+\Big(40H_3^2c^{\pm 2}(1-l_2)^2\big(q^{\pm 3}l_1^2(l_1^3-l_2^3)-q^{\pm 2}l_1(l_1^3-l_2^3)\big)+120H_3^2c^{\pm 2}(1-l_2)^2\times$$

$$\times q^{\pm 3}l_1^3(l_2^2-l_2l_1)-96H_3^2c^{\pm 2}q^{\pm 2}(1-l_2)^2l_1^2(l_2^2-l_2l_1)+4H_3^2c^{\pm 2}q^{\pm}(1-l_2)^2(l_2l_1^2-l_1^3)\Big)r+(12l_1^4-$$

$$-4l_1^3(5+7l_2)+4l_1^2\big(11(1-l_2)^2-3-21l_2\big)+4l_1\big(7(1-l_2)^3-22(1-l_2)^2+21(1-l_2)-12\big)-$$

$$-4l_2\big(7(1-l_2)^2-4(1-l_2)+3\big)\Big)H_3^2c^{\pm 2}q^{\pm 2}l_1^2+(20l_1^3(1-l_2)-12l_1^2(3-2l_2)-4l_1(5(1-l_2)^3-$$

$$-11(1-l_2)^2+6(1-l_2)-6\Big)H_3^2c^{\pm 2}q^{\pm}l_1+\big(l_1^2(1-4l_2)-l_2^2(1-4l_2)\big)H_3^2c^{\pm 2}\Big)$$

$$\gamma_2^{\pm}=\frac{1}{12c^{\pm}H_3l_1(1-l_2)\big(1-4rq^{\pm 2}l_1(1-l_2)(l_2-l_1)\big)}\times\Big(\big(216rq^{\pm}H_3l_1^2(1-l_2)^2(l_1-l_2)-18H_3l_1(1-l_2)\big)\beta+$$

$$+\Big(\big(24H_3^3l_1^2c^{\pm}(1-l_2)^2(l_1^3-l_2^3)+72H_3^3l_1^3c^{\pm}(1-l_2)^2(l_1-l_2)\big)rq^{\pm}-6H_3^3l_1c^{\pm}(1-l_2)(l_1^2-l_2^2)\Big)\alpha+$$

$$+\Big(192l_1^2c^{\pm}q^{\pm 3}r(1-l_2)^2(l_1-l_2)-48l_1c^{\pm}q^{\pm 2}r(1-l_2)^2(l_1-l_2)+96l_1^2c^{\pm}q^{\pm 2}\big(l_1^2-l_1(1+l_2)+l_2\big)+$$

$$+12c^{\pm}\big(2q^{\pm}l_1(l_2-l_1)+1+2l_2\big)\Big)\beta+\Big(56H_3^2c^{\pm 2}(1-l_2)^2\left(q^{\pm 3}l_1^2(l_1^3-l_2^3)-q^{\pm 2}l_1\left(\frac{13}{7}l_1^3-l_2^3\right)\right)+168H_3^2c^{\pm 2}(1-l_2)^2\times$$

$$\times q^{\pm 3}l_1^3(l_2^2-l_2l_1)-96H_3^2c^{\pm 2}q^{\pm 2}(1-l_2)^2l_1^2\left(\frac{5}{2}l_2^2-l_2l_1\right)-4H_3^2c^{\pm 2}q^{\pm}(1-l_2)^2(l_2l_1^2-l_1^3)\Big)r+(12l_1^4-$$

$$-4l_1^3(7+5l_2)+4l_1^2\big(19(1-l_2)^2+3+15l_2\big)+4l_1\big(17(1-l_2)^3-38(1-l_2)^2+15(1-l_2)-12\big)-$$

$$-4l_2\big(17(1-l_2)^2-2(1-l_2)+3\big)\Big)H_3^2c^{\pm 2}q^{\pm 2}l_1^2+(52l_1^3(1-l_2)-12l_1^2(9-8l_2)-4l_1(13(1-l_2)^3-$$

$$-19(1-l_2)^2-6(1-l_2)-6\Big)H_3^2c^{\pm 2}q^{\pm}l_1+\big(l_1^2(5-8l_2)-l_2^2(5-8l_2)\big)H_3^2c^{\pm 2}\Big)$$

$$\beta_1^{\pm}=\frac{1}{720c^{\pm}\big(1-4rq^{\pm 2}l_1(1-l_2)(l_2-l_1)\big)}\times\Big(\big(-360+4320l_1(1-l_2)(l_1-l_2)rq^{\pm 2}\big)\beta^2+$$

$$+\Big(480H_3^2c^{\pm}rq^{\pm 2}l_1(1-l_2)(l_1^3-l_2^3)+1440H_3^2c^{\pm}rq^{\pm 2}l_1^2(1-l_2)(l_2^2-l_2l_1)-120H_3^2c^{\pm}(l_1^2-2l_2+l_2^2)\Big)\beta+$$

$$+\Big(\big(12l_1(l_1^5-l_2^5)+60l_1^2(l_2^4-l_2l_1^3)+120l_1^3(l_1l_2^2-l_2^3)\big)q^{\pm 2}+\big(14l_2l_1^4-20l_2^3l_1^2+6l_2^5\big)q^{\pm}\Big)H_3^4c^{\pm 2}(1-l_2)r+$$

$$+\Big(-6l_1^6+30l_1^5+20l_1^4\big(-3+(1-l_2)^2\big)+60l_1^3l_2(2-l_2)-2l_1^2\big(7(1-l_2)^4-30(1-l_2)^2+15\big)+$$

$$-2l_1l_2(2-l_2)\big(7(1-l_2)^2-3\big)\Big)H_3^4c^{\pm 2}q^{\pm}l_1+\Big(-7l_1^4+10l_1^2l_2(2-l_2)+l_2(2-l_2)\big(7(1-l_2)^2-3\big)\Big)H_3^4c^{\pm 2}\Big)$$

$$\tilde{\alpha}^{\pm}(1-l_2,1-l_1,\frac{1}{r})=\alpha^{\pm}(l_1,l_2,r),$$

$$\tilde{\alpha}_1^{\pm}(1-l_2,1-l_1,\frac{1}{r})=\alpha_1^{\pm}(l_1,l_2,r),$$

$$\tilde{\gamma}_1^{\pm}(1-l_2,1-l_1,\frac{1}{r})=\gamma_1^{\pm}(l_1,l_2,r),$$

$$\tilde{\gamma}_2^{\pm}(1-l_2,1-l_1,\frac{1}{r})=\gamma_2^{\pm}(l_1,l_2,r)$$

p. 15 line 13

Delete: Equations (29) are integrable using the inverse scattering method only for one specific set of nontrivial values of their coefficients (Newell, 1985). Substitute for: Equations (29) are integrable using the inverse scattering method only for two specific set of nontrivial values of their coefficients (Newell, 1985; Zwillinger, 1997; Weisstein).

p. 30 line 33

Weisstein, Eric W. "Sawada-Kotera Equation." From MathWorld – A Wolfram Web Resource. http://mathworld.wolfram.com/Sawada-KoteraEquation.html

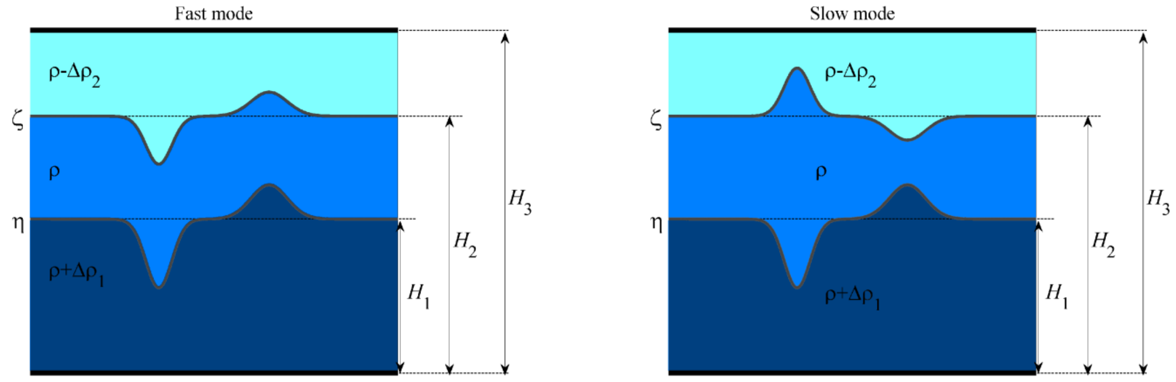
Weisstein, Eric W. "Kupershmidt Equation." From MathWorld – A Wolfram Web Resource. http://mathworld.wolfram.com/KupershmidtEquation.html

p. 31 line 7

Paste: Zwillinger, D.: Handbook of Differential Equations, 3rd ed. Boston, MA: Academic Press, 834 pp., 1997.

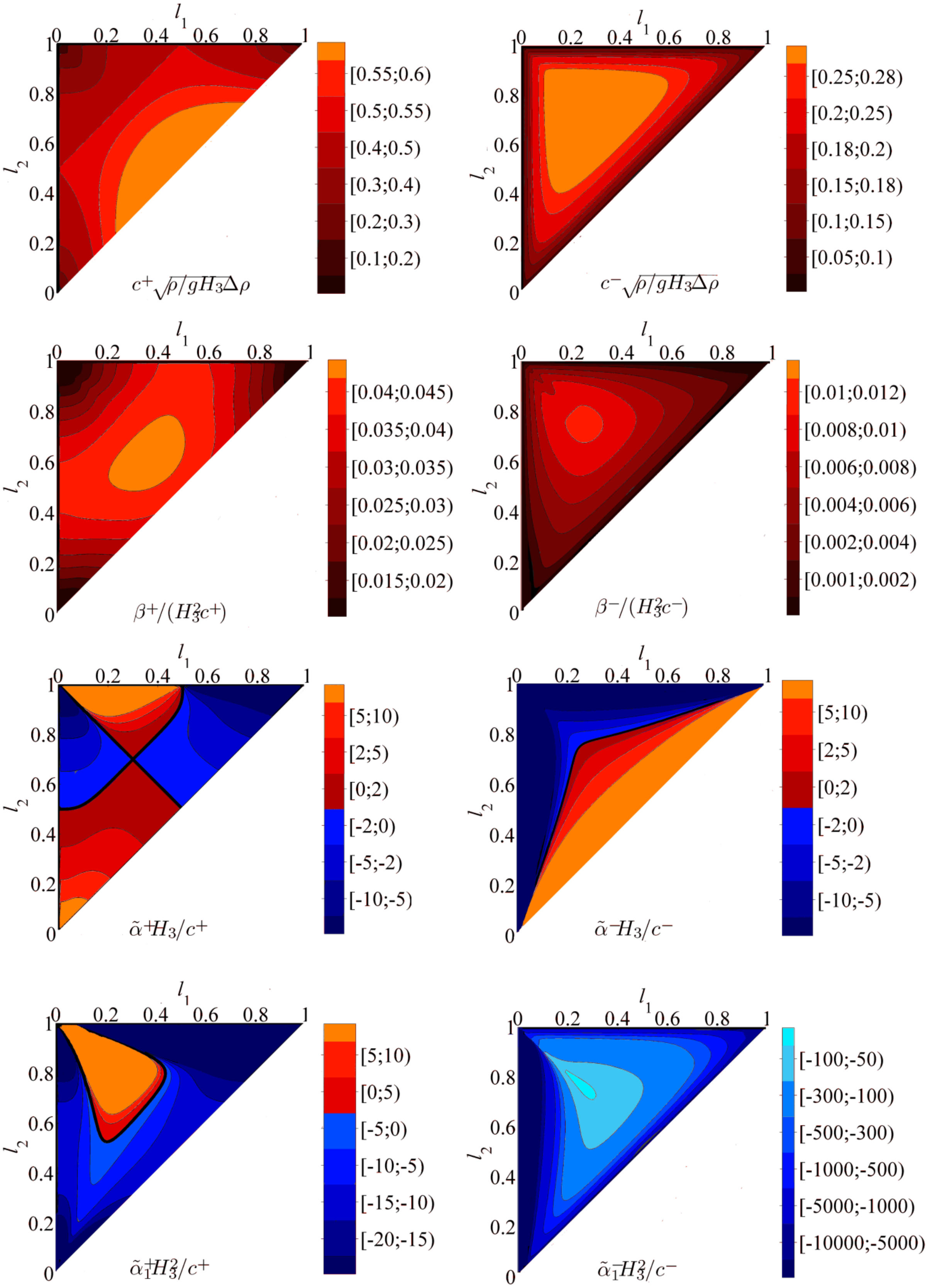
p. 32

Substitute for

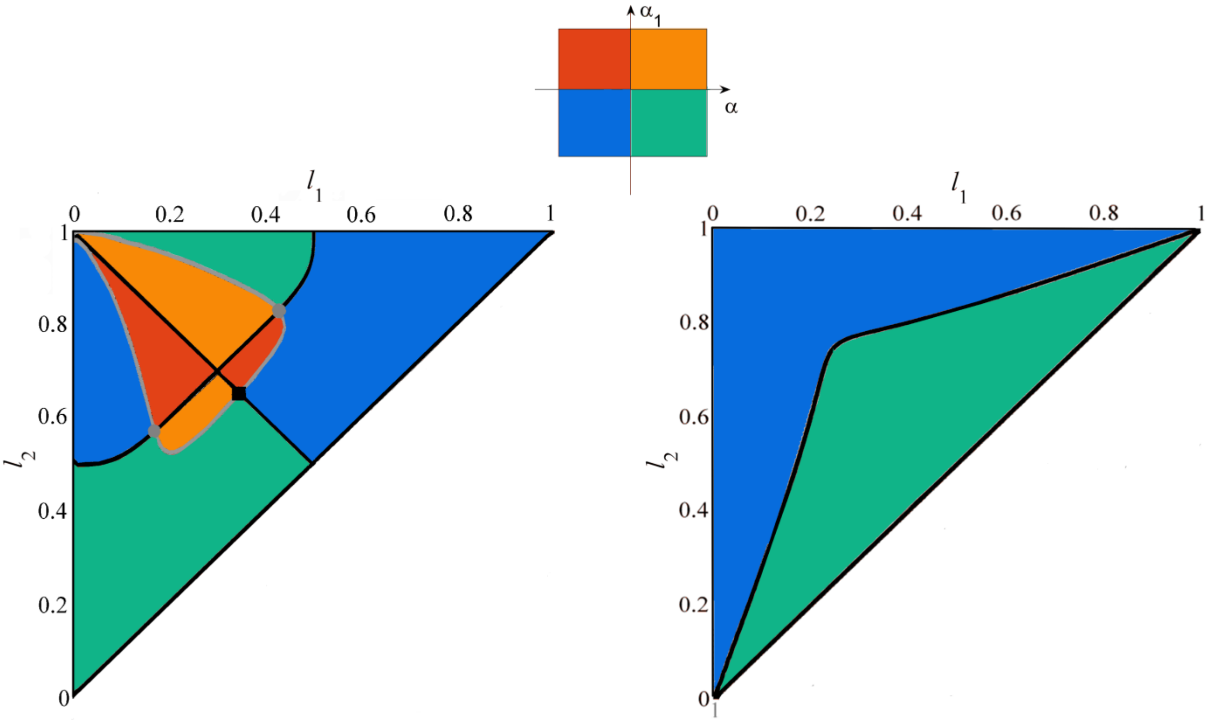


p. 34

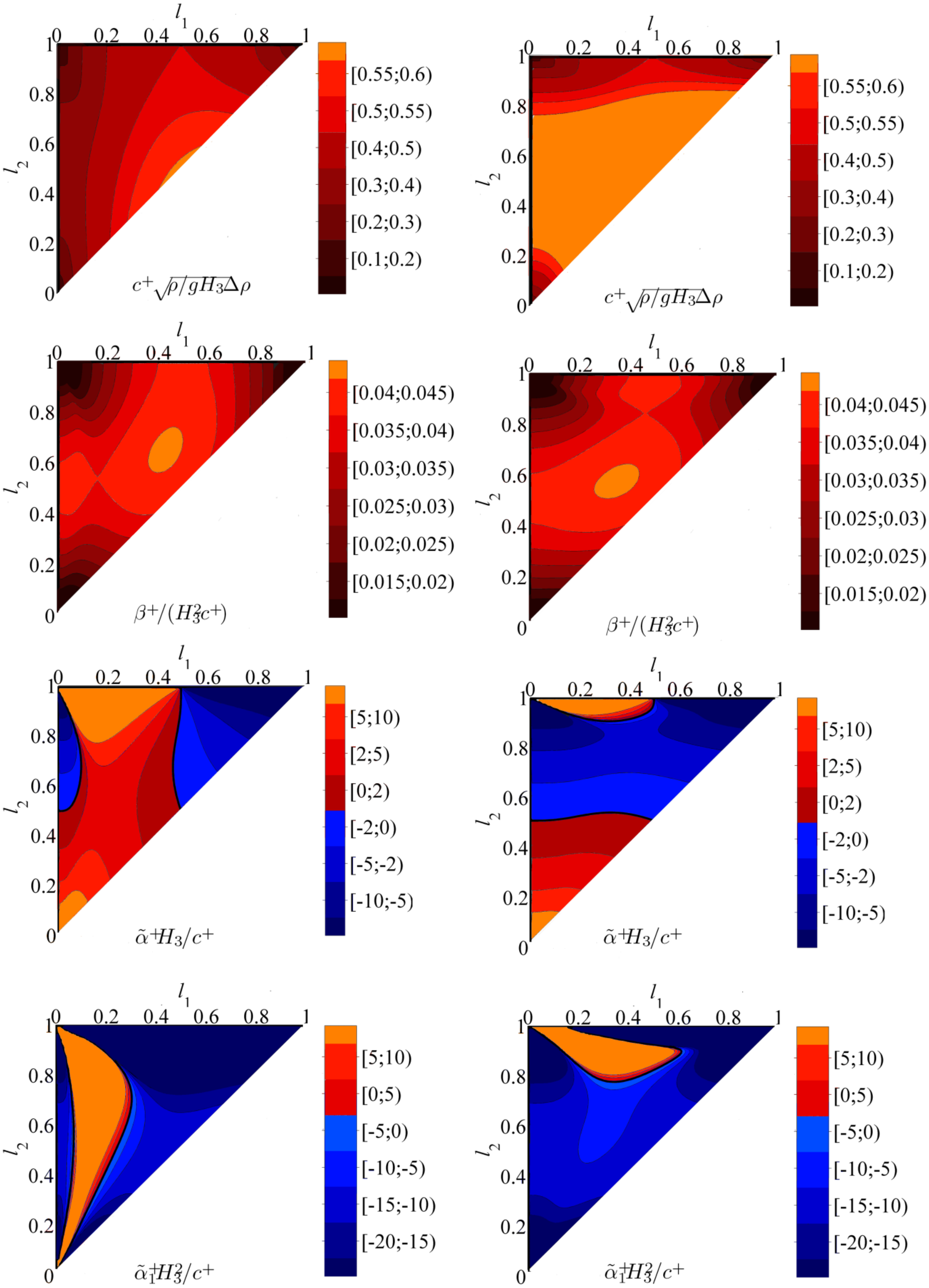
Substitute for



p. 35
Substitute for

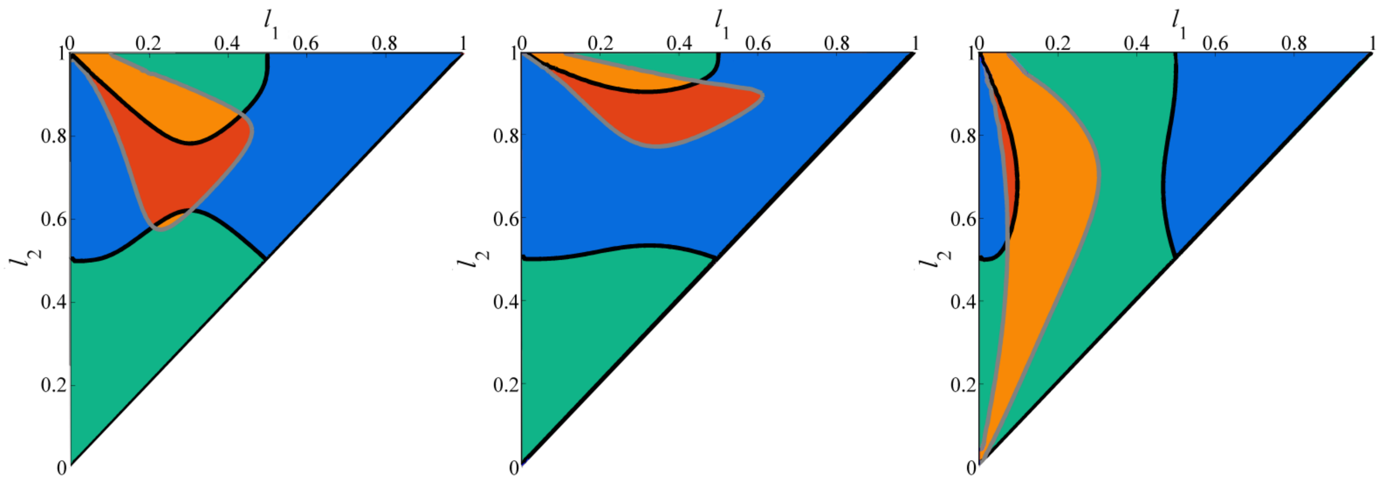


p. 38
Substitute for



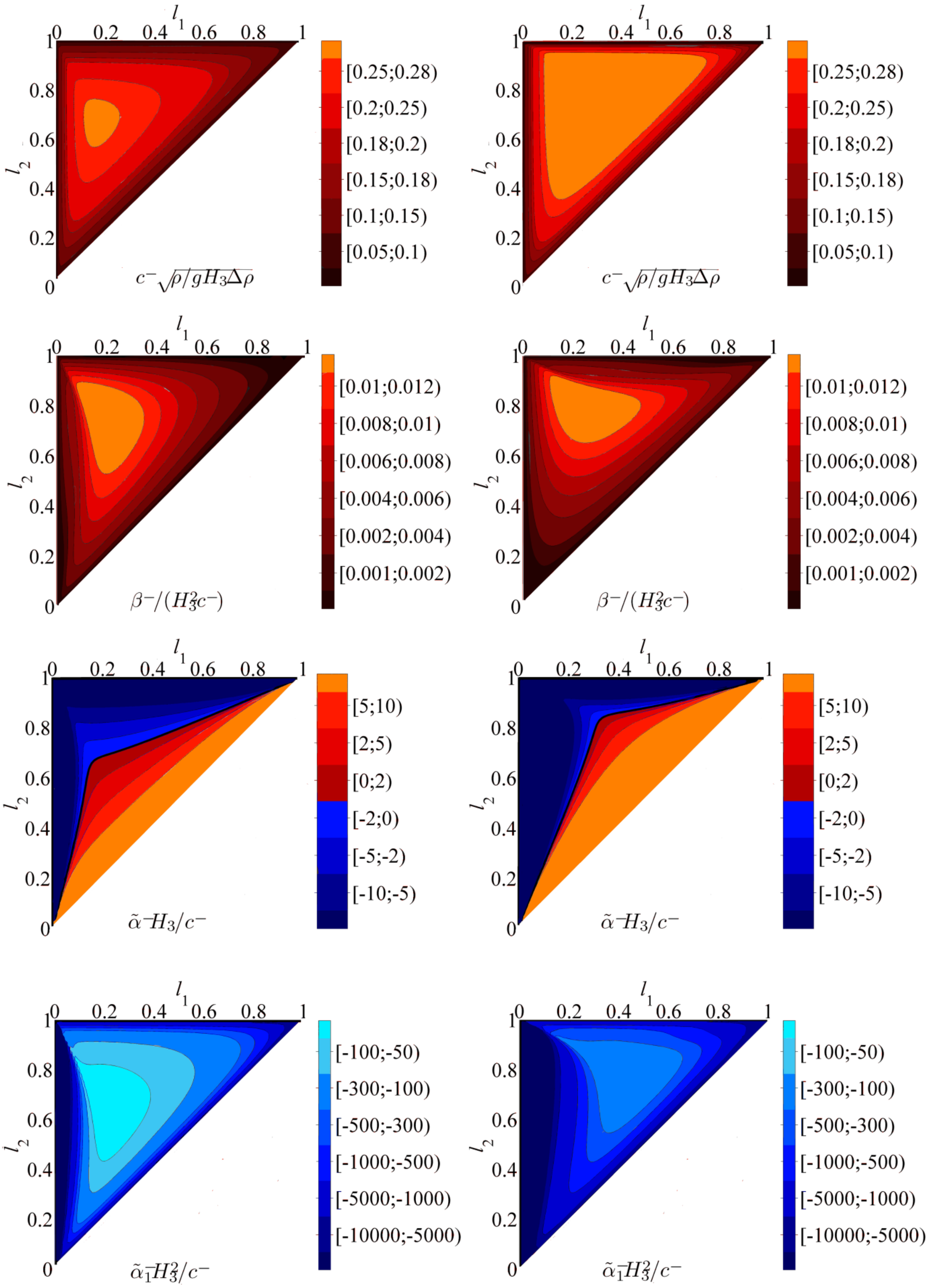
p. 39

Substitute for



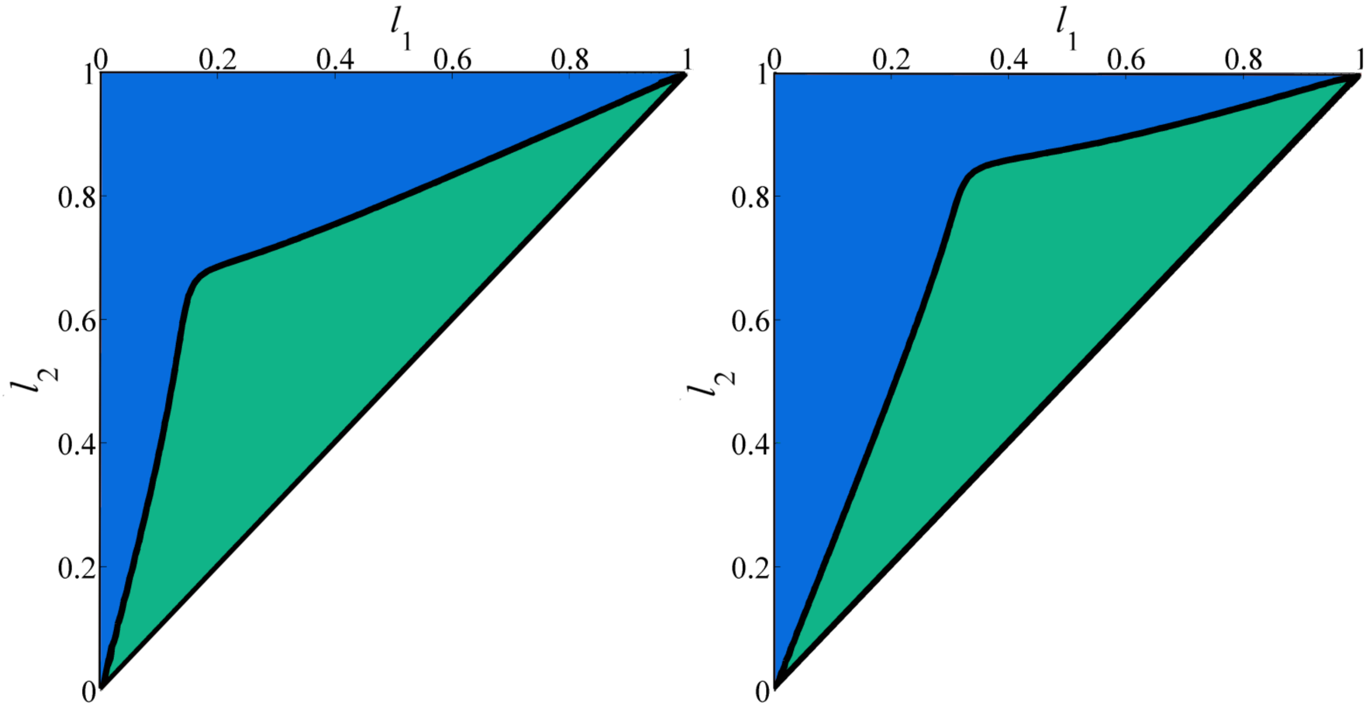
p. 40

Substitute for



p. 41

Substitute for



p. 15 line 4

Delete formula (30)

p. 12 line 10

(28) substitute for (26)