Errata

J. J. Kozak and O. E. Rössler, Weak Mixing in a Quantum System, Z. Naturforsch. **37a**, 33–38 (1982).

In Figs. 1–4, the dashed lines should have been drawn solid, and vice versa.

M. Christahl and J. Thönnissen, Exzeßenthalpien und Solvatationsverhalten der Systeme LiBr/Methanol, $ZnBr_2$/Methanol und LiBr/$ZnBr_2$/Methanol, Z. Naturforsch. **37a**, 224–231 (1982).

In Tab. 1, Seite 226, müssen alle Vorzeichen der Konstanten invertiert werden. Richtig muß also Tab. 1 heißen:

	System LiBr/Methanol		System $ZnBr_2$/Methanol	
	20 °C	60 °C	20 °C	60 °C
A	−840.879	−839.641	−420.700	−391.522
B	−569.670	−684.226	+211.488	+202.342
C	+797.447	+909.932	+ 89.653	+ 21.233
$\bar{A}$	+ 16.210	+ 12.633	+ 17.222	+ 22.885
$\bar{B}$	−197.427	−184.955	−177.626	−189.993
$\bar{C}$	+116.607	+103.945	+110.045	+121.240

E. Rebhan, Nonlinear Evolution of Internal Ideal MHD Modes Near the Boundary of Marginal Stability, Z. Naturforsch. **37a**, 816–829 (1982).

The Eqs. (25)* in Sect. 4 are wrong and should be replaced by

$$\boldsymbol{\xi}_1 = \boldsymbol{\varphi}_1, \tag{E1}$$

$$\boldsymbol{\xi}_2 = \boldsymbol{\varphi}_2 + \tfrac{1}{2}\boldsymbol{\varphi}_1 \cdot \nabla\boldsymbol{\varphi}_1, \tag{E2}$$

$$\begin{aligned}\boldsymbol{\xi}_3 = \boldsymbol{\varphi}_3 &+ \frac{1}{A_1 A_2}(a_{12}\boldsymbol{\varphi}_{20}\cdot\nabla\boldsymbol{\varphi}_1 + a_{21}\boldsymbol{\varphi}_1\cdot\nabla\boldsymbol{\varphi}_{20}) + \frac{1}{2}(\boldsymbol{\varphi}_{21}\cdot\nabla\boldsymbol{\varphi}_1 + \boldsymbol{\varphi}_1\cdot\nabla\boldsymbol{\varphi}_{21}) \\ &+ \frac{1}{3}\Big[\boldsymbol{\varphi}_{22}\cdot\nabla\boldsymbol{\varphi}_1 + 2\boldsymbol{\varphi}_1\cdot\nabla\boldsymbol{\varphi}_{22} \\ &\qquad + \frac{1}{2}(\boldsymbol{\varphi}_1\cdot\nabla\boldsymbol{\varphi}_1)\cdot\nabla\boldsymbol{\varphi}_1 + \frac{1}{2}\boldsymbol{\varphi}_1\boldsymbol{\varphi}_1 : \frac{\partial}{\partial\boldsymbol{r}}\frac{\partial}{\partial\boldsymbol{r}}\boldsymbol{\varphi}_1\Big].\end{aligned} \tag{E3}$$

The error in the derivation of (25) occurs in (22), which is not an integral of (21).

Equations (E1)–(E3) allow to calculate the nonlinear plasmadisplacement

$$\boldsymbol{\xi} = \varepsilon\boldsymbol{\xi}_1 + \varepsilon^2\boldsymbol{\xi}_2 + \varepsilon^3\boldsymbol{\xi}_3 + \cdots \tag{E4}$$

from the timeintegral

$$\boldsymbol{\varphi} = \varepsilon\boldsymbol{\varphi}_1 + \varepsilon^2\boldsymbol{\varphi}_2 + \varepsilon^3\boldsymbol{\varphi}_3 + \cdots \tag{E5}$$

of the local velocity. The latter is used throughout the paper, and hence the error in (25) has no consequences for the rest of the paper.

* The equations in this Erratum are numbered (E1), (E2) etc. while simple numbers like (25) refer to equations in the original paper.

Proof of (E1)—(E3)

By expansion of $\boldsymbol{v}(\boldsymbol{r}+\boldsymbol{\xi}(\boldsymbol{r},t),t)$ with respect to $\boldsymbol{\xi}$, (21) becomes

$$\partial\boldsymbol{\xi}/\partial t = \boldsymbol{v}(\boldsymbol{r},t) + \boldsymbol{\xi}\cdot\nabla\boldsymbol{v}(\boldsymbol{r},t) + \frac{1}{2}\boldsymbol{\xi}\boldsymbol{\xi}:\frac{\partial}{\partial\boldsymbol{r}}\frac{\partial}{\partial\boldsymbol{r}}\boldsymbol{v}(\boldsymbol{r},t) + \cdots. \tag{E6}$$

With (18)—(19) and the expansions (E4)—(E5), one obtains the equations

$$\partial\boldsymbol{\xi}_1/\partial T = \partial\boldsymbol{\varphi}_1/\partial T, \quad \partial\boldsymbol{\xi}_2/\partial T = \partial\boldsymbol{\varphi}_2/\partial T + \boldsymbol{\xi}_1\cdot\nabla\,\partial\boldsymbol{\varphi}_1/\partial T,$$

$$\partial\boldsymbol{\xi}_3/\partial T = \partial\boldsymbol{\varphi}_3/\partial T + \boldsymbol{\xi}_2\cdot\nabla\,\partial\boldsymbol{\varphi}_1/\partial T + \boldsymbol{\xi}_1\cdot\nabla\,\partial\boldsymbol{\varphi}_2/\partial T + \frac{1}{2}\boldsymbol{\xi}_1\boldsymbol{\xi}_1:\frac{\partial}{\partial\boldsymbol{r}}\frac{\partial}{\partial\boldsymbol{r}}\partial\boldsymbol{\varphi}_1/\partial T$$

by equating equal powers of ε on both sides of (E6). From these, (E1) follows immediately, and with this and the ansatz (37), (E2) follows as well.

With the results (E1)—(E2), the ansatz (46) and the definitions (52), one obtains

$$\boldsymbol{\xi}_2\cdot\nabla\,\partial\boldsymbol{\varphi}_1/\partial T = \frac{\partial}{\partial T}\Big\{a_{12}\,\boldsymbol{\Phi}_{20}\cdot\nabla\boldsymbol{\Phi}_1 + \tau_1\frac{A_1{}^2}{2}\boldsymbol{\Phi}_{21}\cdot\nabla\boldsymbol{\Phi}_1 + \frac{A_1{}^3}{6}[\boldsymbol{\Phi}_{22}\cdot\nabla\boldsymbol{\Phi}_1 + (\boldsymbol{\Phi}_1\cdot\nabla\boldsymbol{\Phi}_1)\cdot\nabla\boldsymbol{\Phi}_1]\Big\},$$

$$\boldsymbol{\xi}_1\cdot\nabla\,\partial\boldsymbol{\varphi}_2/\partial T = \frac{\partial}{\partial T}\left(a_{21}\,\boldsymbol{\Phi}_1\cdot\nabla\boldsymbol{\Phi}_{20} + \tau_1\frac{A_1{}^2}{2}\boldsymbol{\Phi}_1\cdot\nabla\boldsymbol{\Phi}_{21} + \frac{A_1{}^3}{3}\boldsymbol{\Phi}_1\cdot\nabla\boldsymbol{\Phi}_{22}\right),$$

$$\frac{1}{2}\boldsymbol{\xi}_1\boldsymbol{\xi}_1:\frac{\partial}{\partial\boldsymbol{r}}\frac{\partial}{\partial\boldsymbol{r}}\boldsymbol{\varphi}_1 = \frac{\partial}{\partial T}\left(\frac{A_1{}^3}{6}\boldsymbol{\Phi}_1\boldsymbol{\Phi}_1:\frac{\partial}{\partial\boldsymbol{r}}\frac{\partial}{\partial\boldsymbol{r}}\boldsymbol{\Phi}_1\right),$$

and thus

$$\boldsymbol{\xi}_3 = \boldsymbol{\varphi}_3 + a_{12}\,\boldsymbol{\Phi}_{20}\cdot\nabla\boldsymbol{\Phi}_1 + a_{21}\,\boldsymbol{\Phi}_1\cdot\nabla\boldsymbol{\Phi}_{20} + \tau_1\frac{A_1{}^2}{2}(\boldsymbol{\Phi}_{21}\cdot\nabla\boldsymbol{\Phi}_1 + \boldsymbol{\Phi}_1\cdot\nabla\boldsymbol{\Phi}_{21}) + \frac{A_1{}^3}{6}\left[\boldsymbol{\Phi}_{12}\cdot\nabla\boldsymbol{\Phi}_1 + 2\,\boldsymbol{\Phi}_1\cdot\nabla\boldsymbol{\Phi}_{22} + (\boldsymbol{\Phi}_1\cdot\nabla\boldsymbol{\Phi}_1)\cdot\nabla\boldsymbol{\Phi}_1 + \boldsymbol{\Phi}_1\boldsymbol{\Phi}_1:\frac{\partial}{\partial\boldsymbol{r}}\frac{\partial}{\partial\boldsymbol{r}}\boldsymbol{\Phi}_1\right].$$

From this, (E3) is finally obtained by using again the definitions (46).

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