Errata

Clausius' entropy revisited

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On page 1450073-1, the revised date should be inserted as: 16 March 2014.

On page 1450073-2, Eqs. (2) and (3) should be as follows:

Eq. (2) — third line, the left-hand side should read $\frac{3}{2}n(\mathbf{r}, t)kT(\mathbf{r}, t)$.

Eq. (3) — third line, the left-hand side should read $\frac{3}{2}n_{eq}kT_{eq}$.

Eq. (4) — the right side should read $c_M n_{eq} e^{-\frac{mv^2}{2kT_{eq}}}$.

On page 1450073-4, line 9, Ref. 3 should be changed to Ref. 4.

The footnotes should read as below:

^bThe differences between the average velocities in each fluid layer is the origin of the entropy production, because particles with different average velocities enter each layer from neighboring layers and thereby perturb each layer. (see e.g. Fig. 1)

^cSee Ref. 2, p. 8.

^dSee Ref. 2, p. 106.

^eIn a system in thermal equilibrium an ordering or organization can also occur, e.g. when a solid forms. However, this is due to the requirement of a minimal energy or potential energy, since the kinetic energy is given.

^fThe reason for the overlooking of the current's organization in Ref. 4 is the restriction to systems in a local equilibrium state only, so that for the transition to equilibrium, only the disappearance of the entropy production is mentioned.

Footnote g, which was previously footnote f, should appear in line 8 on page 1450073-5 after "particles' disorder in a system in equilibrium."

On page 1450073-5, line 15, the citation of Ref. 4 should be changed to 5.

Errata

The references should be amended as follows:

Reference 1 should be:

1. F. Schwabl, *Statistical Mechanics* (Springer-Verlag, Berlin, 2002) p. 444–449.

The reference to Landau and Lifshitz is now Ref. 2.

The reference to Reif is now Ref. 3.

The reference to De Groot and Mazur is now Ref. 4.

The reference to Landauer is now Ref. 5.