

**ERRATUM TO THE ARTICLE “OPTIMAL ESTIMATE OF THE
SPECTRAL GAP FOR THE DEGENERATE
GOLDSTEIN-TAYLOR MODEL”**

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In [1], on page 366, line 5 and on page 369, line 12, replace

$$“\alpha = 2\|\sigma\|_{L^1(\mathbb{T})}.”$$

with

$$“\alpha = 2 \min\{\|\sigma\|_{L^1(\mathbb{T})}, -D(0)\},$$

where $D(0)$ is defined in [10], page 4”.

We underline that the strategy of proof described in [1] is independent of the value of α .

The precise formulation of $D(0)$ is recalled below. Let

$$A_\sigma = \begin{pmatrix} 0 & 1 \\ \partial_{xx} & -2\sigma \end{pmatrix}$$

with

$$\mathcal{D}(A_\sigma) = (H_0^1 \cap H^2) \oplus H_0^1,$$

and denote with $\text{sp}(A_\sigma)$ the spectrum of A_σ . For $R > 0$, consider

$$D(R) = \sup\{\mathcal{R}e(\lambda_j), \lambda_j \in \text{sp}(A_\sigma), |\lambda_j| \geq R\}.$$

The value of $D(0)$ is then obtained in the limit $D(0) = \lim_{R \rightarrow 0^+} D(R)$.

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REFERENCES

- [1] Étienne Bernard and Francesco Salvarani. Optimal estimate of the spectral gap for the degenerate Goldstein-Taylor model. *J. Stat. Phys.*, 153(2):363–375, 2013.

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