

# Bayesian-EUCLID: discovering hyperelastic material laws with uncertainties

Akshay Joshi<sup>a</sup>, Prakash Thakolkaran<sup>a</sup>, Yiwen Zheng<sup>a</sup>, Maxime Escande<sup>b</sup>,  
Moritz Flaschel<sup>b</sup>, Laura De Lorenzis<sup>b</sup>, Siddhant Kumar<sup>a,\*</sup>

<sup>a</sup>*Department of Materials Science and Engineering, Delft University of Technology, 2628  
CD Delft, The Netherlands*

<sup>b</sup>*Department of Mechanical and Process Engineering, ETH Zürich, 8092 Zürich,  
Switzerland*

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## Corrections to the original article

The original article ([Joshi et al., 2022](#)) published by the authors contain the following typographical mistakes.

- Equation 14 in the original article:

$$\text{OG}_i(\tilde{I}_1, J) = \frac{2}{\alpha_i} \left( \tilde{\lambda}_1^{\alpha_i} + \tilde{\lambda}_2^{\alpha_i} + \tilde{\lambda}_3^{\alpha_i} \right) \quad \text{with} \quad \tilde{\lambda}_k = J^{-1/3} \lambda_k, \quad k = 1, 2, 3,$$

should be corrected to:

$$\text{OG}_i(\tilde{I}_1, J) = \frac{2}{\alpha_i} \left( \tilde{\lambda}_1^{\alpha_i} + \tilde{\lambda}_2^{\alpha_i} + \tilde{\lambda}_3^{\alpha_i} - 3 \right) \quad \text{with} \quad \tilde{\lambda}_k = J^{-1/3} \lambda_k, \quad k = 1, 2, 3.$$

- Equation 46 in the original article:

$$W(\mathbf{F}) = 0.5(\tilde{I}_1 - 3) + (\tilde{I}_1 - 3)^2 + \log(\tilde{I}_2/3) + 1.5(J - 1)^2$$

should be corrected to:

$$W(\mathbf{F}) = 0.5(\tilde{I}_1 - 3) + \log(\tilde{I}_2/3) + 1.5(J - 1)^2.$$

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\*Email: Sid.Kumar@tudelft.nl

## References

Joshi, A., Thakolkaran, P., Zheng, Y., Escande, M., Flaschel, M., De Lorenzis, L., Kumar, S., 2022. Bayesian-EUCLID: Discovering hyperelastic material laws with uncertainties. *Computer Methods in Applied Mechanics and Engineering* 398, 115225. URL: <https://www.sciencedirect.com/science/article/pii/S0045782522003681>, doi:<https://doi.org/10.1016/j.cma.2022.115225>.