Correction to: Understanding the Stochastic Partial Differential Equation Approach to Smoothing

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Correction to: JABES

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Unfortunately, in the original publication of the article, several definitional mistakes crept into the manuscript during writing. A complete, corrected version of the manuscript can be found at <https://arxiv.org/abs/2001.07623>. The results of the paper are unchanged, but the errors and their corrections are listed below.

1. Definition of $c(x, y)$ in Sect. 2.3. The Matérn formulation should be

$$c(x, y) = \frac{2^{1-\nu}}{(4\pi)^{d/2} \kappa^{2\nu} \tau^2 \Gamma(\nu + d/2)} (\kappa \|x - y\|)^\nu K_\nu(\kappa \|x - y\|)$$

2. At end of second paragraph in Sect. 2.3 should be $\alpha = \nu + d/2$.
3. In Sect. 3.1, the thin plate penalties should have squared integrands, i.e., $J(\boldsymbol{\beta}, \lambda) = \lambda \int (\partial^2 f / \partial x^2)^2 + 2 (\partial^2 f / \partial x \partial y)^2 + (\partial^2 f / \partial y^2)^2 dx dy$.
4. In Sect. 3.3, in paragraph 2, the expression should be $\langle Df, Df \rangle = \tau^2 (\kappa^4 \langle f, f \rangle + 2\kappa^2 \langle \nabla f, \nabla f \rangle + \langle \Delta f, \Delta f \rangle)$. Following on from that, the definitions of $\mathbf{G}_1$, $\mathbf{G}_2$ should be $\langle \nabla \psi_i, \nabla \psi_j \rangle$ and $\langle \Delta \psi_i, \Delta \psi_j \rangle$, respectively.

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