Inverse Problem Theory - A. Tarantola - Siam 2004

List of Errata

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page 14

Equation (1.41) and the equation in the following line are incorrect (the final f_2 should be f_n [in the two equations], and a factor $\mu(\mathbf{x})$ is missing). It should be as follows:

The conjunction operation is naturally associative, and one has

$$\frac{(f_1 \wedge f_2 \wedge \dots f_n)(\mathbf{x})}{\mu(\mathbf{x})} \;=\; \frac{1}{\nu}\, \frac{f_1(\mathbf{x})}{\mu(\mathbf{x})}\, \frac{f_2(\mathbf{x})}{\mu(\mathbf{x})} \,\cdots\, \frac{f_n(\mathbf{x})}{\mu(\mathbf{x})} \quad , \tag{1.41}$$

where $\nu = \int_{\mathcal{X}} d\mathbf{x}\; \mu(\mathbf{x})\, \frac{f_1(\mathbf{x})}{\mu(\mathbf{x})}\, \frac{f_2(\mathbf{x})}{\mu(\mathbf{x})} \,\cdots\, \frac{f_n(\mathbf{x})}{\mu(\mathbf{x})}$.

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In the Definition in the middle of the page, the sentence "The conjunction of P and $M_{\mathcal{A}}$, i.e.,..." should be "The conjunction of P and $M_{\mathcal{B}}$, i.e.,...".

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In line 8, "Introducing the conditional probability distribution $P(\mathcal{A}|\mathcal{B})\dots$" should be " Introducing the conditional probability distribution $P(\mathcal{B}|\mathcal{A})\dots$"

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The axis at the left of figure 1.8 should be labeled in $\mathrm{g/cm^3}$, not $\mathrm{g/cm}$.

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Between equations (3.23) and (3.24): "$\cdots = \langle\, \mathbf{G}^t\, \mathbf{C}_{\mathrm{D}}^{-1}\, \mathbf{d}\,,\, \mathbf{m}\,\rangle_{\mathrm{D}} = \dots$ " should be "$\cdots = \langle\, \mathbf{G}^t\, \mathbf{C}_{\mathrm{D}}^{-1}\, \mathbf{d}\,,\, \mathbf{m}\,\rangle_{\mathrm{M}} = \dots$ "

After equation (3.24): suppress "incorrectly".

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Between equations (3.40) and (3.41): "(second of equations (3.38))" should be "(first of equations (3.38))".

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Equation (3.90): " $(dS^2/d\mathbf{m}^2)$ " should be " $(d^2S/d\mathbf{m}^2)$ ".

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After equation (6.15): "where $c^{ij}{}_{k\ell}$ is the tensor..." should be "where $s^{ij}{}_{k\ell}$ is the tensor..."

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Equation

$$g(\sigma) \;=\; \frac{3}{Y(1+\sigma)(1-2\sigma)} \tag{6.27}$$

should be

$$g(\sigma) \;=\; \frac{3}{(1+\sigma)(1-2\sigma)} \tag{6.27}$$