Erratum

Learning probability distributions in continuous evolutionary algorithms – a comparative review

STEFAN KERN, SIBYLLE D. MÜLLER, NIKOLAUS HANSEN,
DIRK BÜCHE, JIRI OCENASEK and PETROS KOUMOUTSAKOS

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Some equations were printed incorrectly, which the publisher deeply regrets. Please note the corrected ones below.

Page 82. Equation (7) should read:

$$c = 10/(n + 20), \quad d = \max\left(1, \frac{3\mu}{n + 10}\right) + c \quad (7)$$

Page 83. Equation (14) should read:

$$c_c = \frac{4}{n + 4}, \quad c_\sigma = \frac{10}{n + 20}, \quad d = \max\left(1, \frac{3\mu}{n + 10}\right) + c_\sigma \quad (14)$$

Page 90. Table 2 should read:

Table 2. Strategy parameters of the algorithms

	N_{parent}	N_{offspr}	other
(1 + 1)-ES	1	1	$\alpha = 2^{1/n}$, success rate 1/5
CSA-ES	$\mu = N_{\text{base}}/2$	$\lambda = N_{\text{base}}$	$c = \frac{10}{n+20}$, $d = \max\left(1, \frac{3\mu}{n+10}\right) + c$
CMA-ES	$\mu = N_{\text{base}}/2$	$\lambda = N_{\text{base}}$	$c_\sigma = \frac{10}{n+20}$, $d = \max\left(1, \frac{3\mu}{n+10}\right) + c_\sigma$ $c_c = \frac{4}{n+4}$, $c_{\text{cov}} = \frac{1}{\mu} \frac{2}{(n + \sqrt{2})^2}$ $+ \left(1 - \frac{1}{\mu}\right) \min\left(1, \frac{2\mu - 1}{(n + 2)^2 + \mu}\right)$
IDEA	τN_{base}	$(1 - \tau)N_{\text{base}}$	$\tau = 0.3$, $\lambda_c = 0.5$, $\kappa = n - 1$ number of clusters threshold for adding a cluster
MBOA	τN_{base}	$N_{\text{base}}/2$	$\tau = 0.5$, window size 5%

Page 92. Table 3 should read:

Table 3. Test functions and initialization intervals (coordinate-wise), where $\mathbf{y} := [\mathbf{o}_1 \dots, \mathbf{o}_n]^T \mathbf{x}$, i.e., $y_i = \mathbf{o}_i^T \mathbf{x}$, see text

Name	Function	Init
Plane	$f_{\text{plane}}(\mathbf{x}) = x_1$	$[0.5, 1.5]^n$
Diagonal plane	$f_{\text{planediag}}(\mathbf{x}) = \frac{1}{n} \sum_{i=1}^n x_i$	$[0.5, 1.5]^n$
Sphere	$f_{\text{sphere}}(\mathbf{x}) = \sum_{i=1}^n x_i^2$	$[-3, 7]^n$
Ellipsoid	$f_{\text{elli}}(\mathbf{x}) = \sum_{i=1}^n \left(100^{\frac{i-1}{n-1}} y_i\right)^2$	$[-3, 7]^n$
Cigar	$f_{\text{cigar}}(\mathbf{x}) = y_1^2 + 10^4 \sum_{i=2}^n y_i^2$	$[-3, 7]^n$
Tablet	$f_{\text{tablet}}(\mathbf{x}) = 10^4 y_1^2 + \sum_{i=2}^n y_i^2$	$[-3, 7]^n$
Rosenbrock	$f_{\text{Rosen}}(\mathbf{x}) = \sum_{i=1}^{n-1} \left(100 \cdot (x_i^2 - x_{i+1})^2 + (x_i - 1)^2\right)$	$[-5, 5]^n$
Rastrigin	$f_{\text{Rastrigin}}(\mathbf{x}) = 10n + \sum_{i=1}^n (y_i^2 - 10 \cos(2\pi y_i))$	$[-3, 7]^n$
Scaled Rastrigin	$f_{\text{Rastrigin10}}(\mathbf{x}) = 10n + \sum_{i=1}^n \left(\left(10^{\frac{i-1}{n-1}} y_i\right)^2 - 10 \cos\left(2\pi 10^{\frac{i-1}{n-1}} y_i\right) \right)$	$[-3, 7]^n$