

Corrigendum

Corrigendum to:
“**Bridging Robustness and Resilience
for Dynamical Systems in Nature**”

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The authors regret to inform the readers that the original publication¹ needs to be amended as follows (the modifications with respect to the original text are highlighted in **blue**).

- In Section 2.1 (*The considered class of systems*), item (2) should read:

For $\lambda \in \mathcal{I} \setminus \{\lambda_0\}$, G_λ is obtained from G_{λ_0} via the addition of the *stochastic* stationary noise term η_λ **multiplied by the smooth function $g(x)$** to the right hand side of the ODE in (2). Hence, the state of G_λ at time $t > 0$ is a random variable, defined on a suitable probability space with probability \mathbb{P}_λ that is induced by the stochastic noise η_λ .

- In Section 2.1, the paragraph before Example 1 should read:

Let A be a closed attractor of G_{λ_0} and $B(A) = \{\chi \in U : \lim_{t \rightarrow \infty} \text{dist}(x(t; \chi, 0), A) = 0\}$ the associated basin of attraction, where $x(t; \chi, 0)$ denotes the trajectory of the nominal system G_{λ_0} , with $\eta_{\lambda_0} \equiv 0$, starting from initial condition χ . **We assume that $g(x) = 0$ for all $x \in A$.** Given $\lambda \in \mathcal{I} \setminus \{\lambda_0\}$, a natural question to ask is whether the attractor-basin pair $(A, B(A))$ preserves its properties for some/all the systems in \mathcal{F} . Before proceeding, we examine two examples from the biological literature.

- In Section 2.1, in all the equations related to the considered examples, **the noise intensity λ should be also multiplied by a smooth function of the state that is zero on the considered attractor.** For instance, Eq. (5) should read:

$$\dot{x} = f_G(x) + \lambda g(x) \eta(t) = -x + a \frac{x^h}{1 + x^h} + k + \lambda g(x) \eta(t).$$

- At the beginning of Section 3 (Numerical Examples) it should be clarified that, **for all the considered examples, we choose the smooth function $g(x)$ as a cutoff function satisfying $g(x) = 0$ for $x \in A + \varphi B(0, 1)$ and $g(x) = 1$ for $x \notin A + 2\varphi B(0, 1)$, where $\varphi > 0$ is small and $B(0, 1)$ is the unit ball around zero.**

The authors would like to apologise for any inconvenience caused.

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