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OPEN Publisher Correction: Holistic **Monte-Carlo optical modelling** of biological imaging

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Guillem Carles, Paul Zammit & Andrew R. Harvey

Correction to: Scientific Reports https://doi.org/10.1038/s41598-019-51850-1, published online 01 November 2019

This Article contains an error in the order of the Figures. Figures 4 and 5 were published as Figures 5 and 4 respectively. The correct Figures 4 and 5 appear below as Figures 1 and 2. The Figure legends are correct.



Figure 1. Geometry of a scattering event. Left diagram: incident ray vector $\hat{\mathbf{e}}_p^i$, and scattered ray vector $\hat{\mathbf{e}}_p^s$ define the scattering plane common to both vectors and θ is the scattering angle. Planes for defining polarisation states are represented by the red and blue squares. Centre diagram: the orthonormal co-ordinate systems for \hat{e}_{p}^{i} and $\hat{\mathbf{e}}_{p}^{s}$; the r direction, common to both systems, is orthogonal to the scattering plane; the propagation direction p and the orthogonal ℓ direction for the scattered photon are rotated by θ in the scattering plane with respect to the incident ray. Right diagram: the electric field \mathbf{E}^i of the incident ray (blue) and \mathbf{E}^s for the scattered ray (red) are decomposed into the respective r and ℓ directions, with respect to the azimuthal angle ϕ ; as for the left diagram, the polarisation planes are shaded red and blue.



Figure 2. Scattering diagrams. Plots of scattering diagrams depicting the phase functions for Mie scattering, for various particle size parameters, $\alpha = \pi dn/\lambda$ (*d* is the particle size, *n* the index of refraction of the medium, and λ the wavelength of the light) and degrees of linear polarisation. The incident ray propagates along *z* axis and scatters at the origin of the axes. The polarised component of the partially polarised incident light is oriented with the major axis in the *y* direction. The surfaces correspond to the phase function and coloured lines are contours of constant θ .

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