

# Erratum: The shape of a memorised random walk

Michał Gnacik, Abdulrahman Alsolami and James Burridge  
School of Mathematics and Physics, University of Portsmouth, Portsmouth,  
PO1 3HF, United Kingdom  
E-mail: james.burridge@port.ac.uk and michal.gnacik@port.ac.uk

An error was introduced during the typesetting of this manuscript, “ $c \rightarrow \infty$  is” is missing from the manuscript. Theorem 1 should read:

**Theorem 1** (Egocentric Asphericity). *The egocentric asphericity of 2D Brownian motion memorised according to  $\mu$ , that is,  $(X(t), Y(t))_{t \in S}$ , as  $c \rightarrow \infty$  is*

$$A_2 = 1 - 4 \lim_{\tau \rightarrow \infty} \frac{\alpha(\tau)}{\beta(\tau)},$$

where

$$\begin{aligned} \alpha(\tau) = & \frac{1}{2} \left[ \left( \int_0^\tau s \mu(s) ds \right)^2 + \left( \int_0^\tau M(s) ds \right)^2 - \tau^2 M^2(\tau) \right] \\ & + \int_0^\tau [(4s - \tau)M(\tau) - 2sM(s)] M(s) ds, \end{aligned} \quad (8)$$

$$\begin{aligned} \beta(\tau) = & 2 \left[ \left( \int_0^\tau s \mu(s) ds \right)^2 + \left( \int_0^\tau M(s) ds \right)^2 + 3\tau^2 M^2(\tau) \right] \\ & - 4 \int_0^\tau [(4s + \tau)M(\tau) - 2sM(s)] M(s) ds. \end{aligned} \quad (9)$$