

# Corrigendum: A theoretical study on seasonality

Christoph Schmal<sup>1\*</sup>, Jihwan Myung<sup>2</sup>, Hanspeter Herzel<sup>3</sup> and Grigory Bordyugov<sup>1</sup>

<sup>1</sup> Institute for Theoretical Biology, Charité Universitätsmedizin, Berlin, Germany, <sup>2</sup> RIKEN Brain Science Institute, Wako, Japan,

<sup>3</sup> Institute for Theoretical Biology, Humboldt Universität zu Berlin, Berlin, Germany

**Keywords:** circadian clock, entrainment, seasonality, oscillator, photoperiod

A corrigendum on

A theoretical study on seasonality

by Schmal C, Myung J, Herzel H, Bordyugov G. *Front Neurol* (2015) 6:94. doi:10.3389/fneur.2015.00094

## Zeitgeber Function

Equation (15) in Section 1.3 of the Supplementary Data of (1) which originally read as

$$Z(t) = Z_1 \left( 0.5 + \arctan \left[ S \cdot \mu \cdot \left\{ \cos \left( \frac{2\pi t}{T} \right) - \cos(\varkappa \pi) \right\} \right] \right)$$

should be replaced by

$$Z(t) = Z_1 \left( 0.5 + \frac{1}{\pi} \arctan \left[ S \cdot \mu \cdot \left\{ \cos \left( \frac{2\pi t}{T} \right) - \cos(\varkappa \pi) \right\} \right] \right) .$$

## Funding

In addition to the funding information given in Ref. (1), we would like to acknowledge the financial support from the Strategic International Cooperative Program from the Japan Science and Technology Agency.

## Reference

- Schmal C, Myung J, Herzel H, Bordyugov G. A theoretical study on seasonality. *Front Neurol* (2015) 6:94. doi:10.3389/fneur.2015.00094

**Conflict of Interest Statement:** The authors declare that the research was conducted in the absence of any commercial or financial relationships that could be construed as a potential conflict of interest.

Copyright © 2015 Schmal, Myung, Herzel and Bordyugov. This is an open-access article distributed under the terms of the Creative Commons Attribution License (CC BY). The use, distribution or reproduction in other forums is permitted, provided the original author(s) or licensor are credited and that the original publication in this journal is cited, in accordance with accepted academic practice. No use, distribution or reproduction is permitted which does not comply with these terms.

## OPEN ACCESS

### Edited and Reviewed by:

Urs Albrecht,  
University of Fribourg, Switzerland

### \*Correspondence:

Christoph Schmal  
christoph.schmal@charite.de

### Specialty section:

This article was submitted to Sleep and Chronobiology, a section of the journal *Frontiers in Neurology*

**Received:** 17 June 2015

**Accepted:** 26 June 2015

**Published:** 16 July 2015

### Citation:

Schmal C, Myung J, Herzel H and Bordyugov G (2015) Corrigendum: A theoretical study on seasonality. *Front. Neurol.* 6:159. doi: 10.3389/fneur.2015.00159