

# Corrigendum to Unifying Dark Matter and Dark Energy in Chaplygin Gas Cosmology

## 1. Section 1

This is a corrigendum to Swart, A. et. al. (2020). Unifying Dark Matter and Dark Energy in Chaplygin Gas Cosmology published in the SAIP Conference Proceedings Journal of 2019.

## 2. Section 2: List of Amendments and Corrections

### 2.1. Title, Page 208, Line 1

The title reads “Unifying Dark Matter and Dark Energy in Chaplygin Gas Cosmology”.

The title should read “Unifying Dark Matter and Dark Energy in Chaplygin Gas Cosmology: Confronting the Model with Observational Data”.

### 2.2. Section 3, Page 211, Line 20

Equation (18) reads as

$$D_M = \begin{cases} D_H \frac{1}{\Omega_k} \sinh\left(\sqrt{\Omega_k} \frac{D_c}{D_H}\right) & \text{for } \Omega_k > 0, \\ D_c & \text{for } \Omega_k = 0, \text{ and} \\ D_H \frac{1}{|\Omega_k|} \sinh\left(\sqrt{|\Omega_k|} \frac{D_c}{D_H}\right) & \text{for } \Omega_k < 0. \end{cases} \quad (1)$$

The correct equation should actually be written as

$$D_M = \begin{cases} D_H \frac{1}{\Omega_k} \sinh\left(\sqrt{\Omega_k} \frac{D_c}{D_H}\right) & \text{for } \Omega_k > 0, \\ D_c & \text{for } \Omega_k = 0, \text{ and} \\ D_H \frac{1}{|\Omega_k|} \sin\left(\sqrt{|\Omega_k|} \frac{D_c}{D_H}\right) & \text{for } \Omega_k < 0. \end{cases} \quad (2)$$

### 2.3. References, Page 213, Line 36

Reference [2] is given as “Kamenshcik A, Moshella U, and Pasquier V 2008 ArXiv:gr-qc/0103004v2”.

This reference should read “Kamenshchik A Y, Moschella U and Pasquier V 2001 Phys. Lett. B 511 265268 (Preprint gr-qc/0103004)”.