

# Erratum: Evolution of porous dust grains in protoplanetary discs – I. Growing grains

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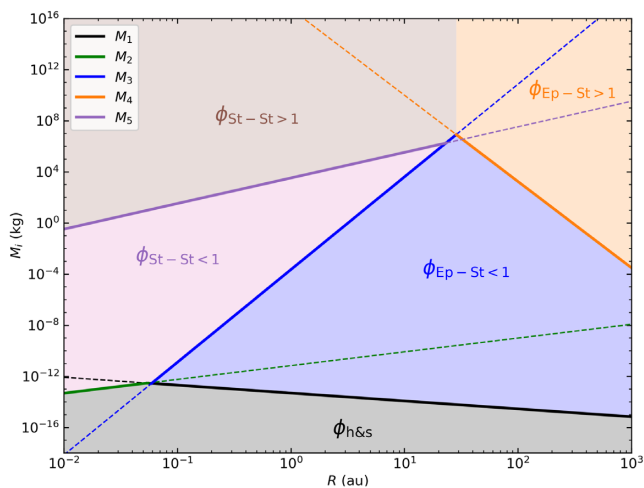
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**Key words:** Errata, addenda – hydrodynamics – methods: numerical – planets and satellites: formation – protoplanetary discs.

The paper ‘Evolution of porous dust grains in protoplanetary discs – I. Growing grains’ published in MNRAS 493, 1788 (2020) presented in its Appendix A an algorithm to compute the value of the filling factor after collision  $\phi_{\text{col}}$ . A typo was unfortunately left behind in the case where  $M_2 < M_1$  and  $M_2 \leq m < M_5$ . It is of little consequence since this condition is only verified extremely close to the star, as illustrated in Fig. 1 in the case of the Classical T Tauri Star (CTTS) disc defined in the paper, and outside our considered radial extent. However, for the sake of completeness, we present here the correct algorithm with the modified line highlighted in bold face.

## ACKNOWLEDGEMENTS

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**Figure 1.** Extension of Fig. A1 to very small radii, past the inner boundary at 3 au considered in the paper, to show the region where  $M_2 < M_1$  interior to 0.06 au.

## Algorithm 1 Calculation of $\phi_{\text{col}}$

```

if  $M_2 < M_1$  then
  if  $m < M_2$  then
     $\phi_{\text{col}} = \phi_{\text{h\&s}}$ 
  else
    if  $m < M_5$  then
       $\phi_{\text{col}} = \phi_{\text{St-St} < 1}$ 
    else
       $\phi_{\text{col}} = \phi_{\text{St-St} > 1}$ 
    end if
  end if
else
  if  $m < M_1$  then
     $\phi_{\text{col}} = \phi_{\text{h\&s}}$ 
  else
    if  $M_4 > M_3$  then
      if  $m < M_3$  then
         $\phi_{\text{col}} = \phi_{\text{Ep-St} < 1}$ 
      else
        if  $m < M_5$  then
           $\phi_{\text{col}} = \phi_{\text{St-St} < 1}$ 
        else
           $\phi_{\text{col}} = \phi_{\text{St-St} > 1}$ 
        end if
      end if
    else
      if  $m < M_4$  then
         $\phi_{\text{col}} = \phi_{\text{Ep-St} < 1}$ 
      else
         $\phi_{\text{col}} = \phi_{\text{Ep-St} > 1}$ 
      end if
    end if
  end if
end if

```

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## REFERENCE

Hunter J. D., 2007, *Computing in Science & Engineering*, 9, 90

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