

ERRATUM: “THE SPIN RATE OF PRE-COLLAPSE STELLAR CORES: WAVE-DRIVEN ANGULAR
MOMENTUM TRANSPORT IN MASSIVE STARS” (2015, *ApJ*, 810, 101)

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Due to a press error, in the original article footnote 4 was incorrectly typeset, resulting in incorrect values and equations. IOP sincerely regrets the error and has reproduced the footnote in full below.

It is possible that the stochastic spin-up process saturates due to back-reaction on the convective shell, which gains AM opposite to the AM deposited by IGW in the core. The induced spin of the convective shell may alter wave generation such that the AM of subsequent wave packets is not randomly oriented and the AM of the core does not undergo a purely random walk. This effect depends on uncertain details such as the rotation profile at the core–shell interface and the effect of the Coriolis force on wave generation. However, we may guess that in the limit of $\Omega_{\text{shell}} \ll \omega_c$, the AM of each wave packet could obtain a non-stochastic component of order $m |J_w| \Omega_{\text{shell}}/\omega_c$. In this case, the stochastic build-up of AM within the core would saturate when the net deposition of stochastic AM is comparable to the non-stochastic AM deposition, which occurs when $\sqrt{N} \sim Nm\Omega_{\text{shell}}/\omega_c$. The expected rotation rate of the core after stochastic spin saturation is $\Omega_{\text{ex}} \sim I_c^{-1} \sqrt{2\pi I_{\text{shell}} \dot{E}/\omega_c}$. We find that stochastic spin-up may saturate during C/O burning, leading to $P_{\text{ex,Fe}} \sim 2 \times 10^3$ s for each of these stages. Interestingly, this spin period is similar to the value of $P_{\text{ex,Fe}}$ generated by stochastic spin-up during Si burning. However, the saturation state is unlikely to be reached during Si shell burning, and so our calculations for Si burning remain unchanged. Therefore, we find the value of P_{ex} set by Si burning to be reasonable, regardless of the details of stochastic spin saturation.