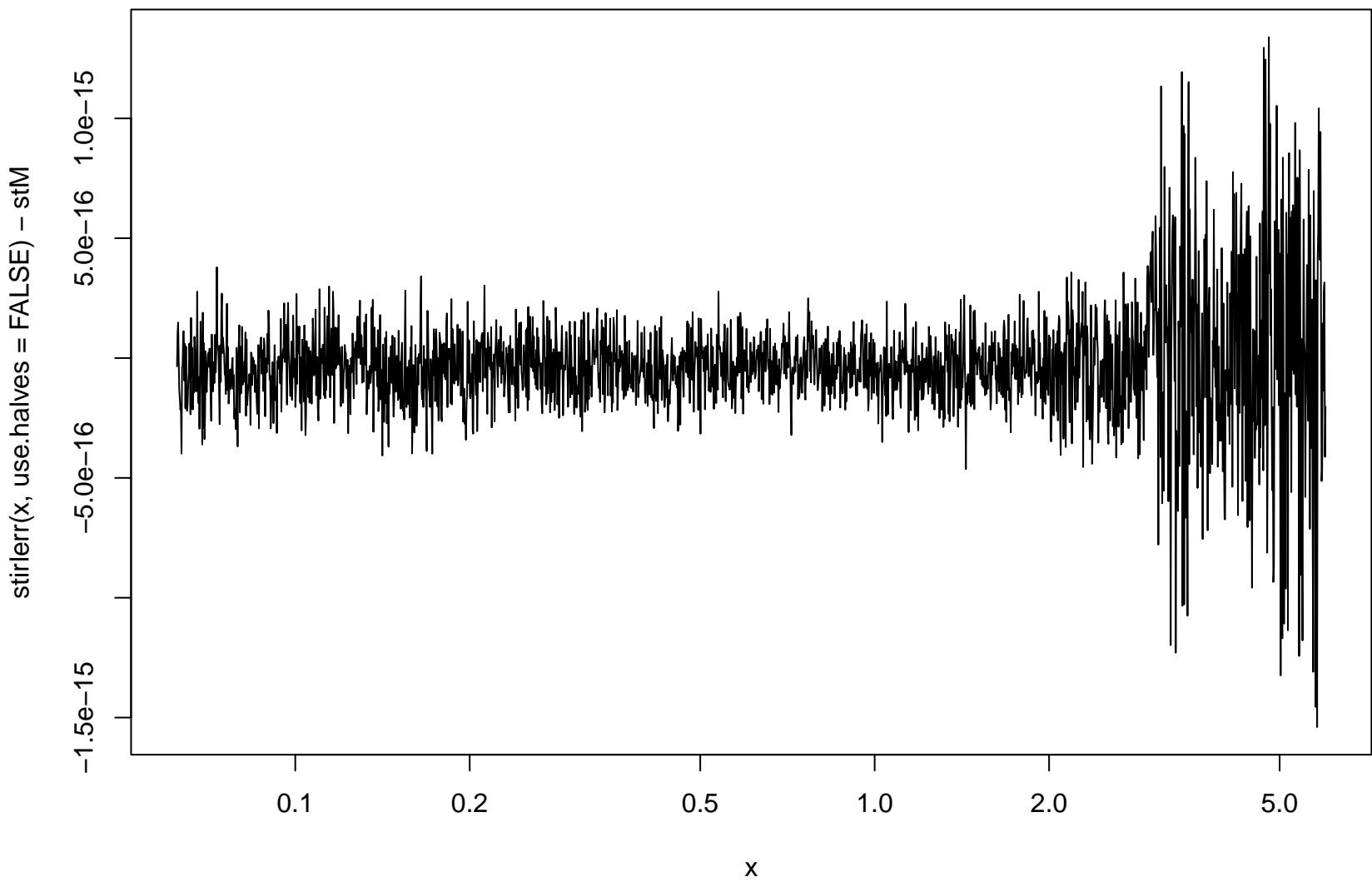
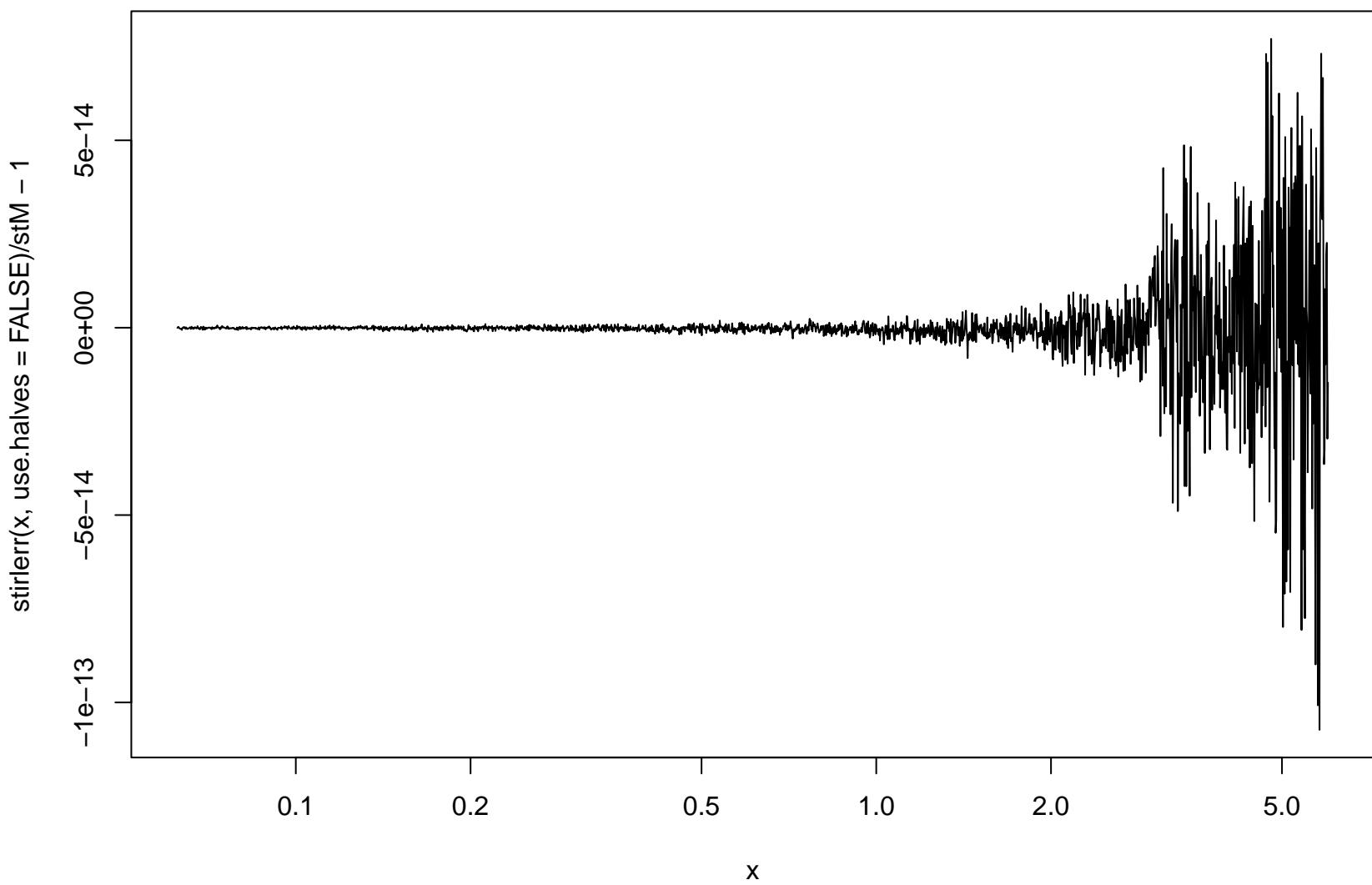


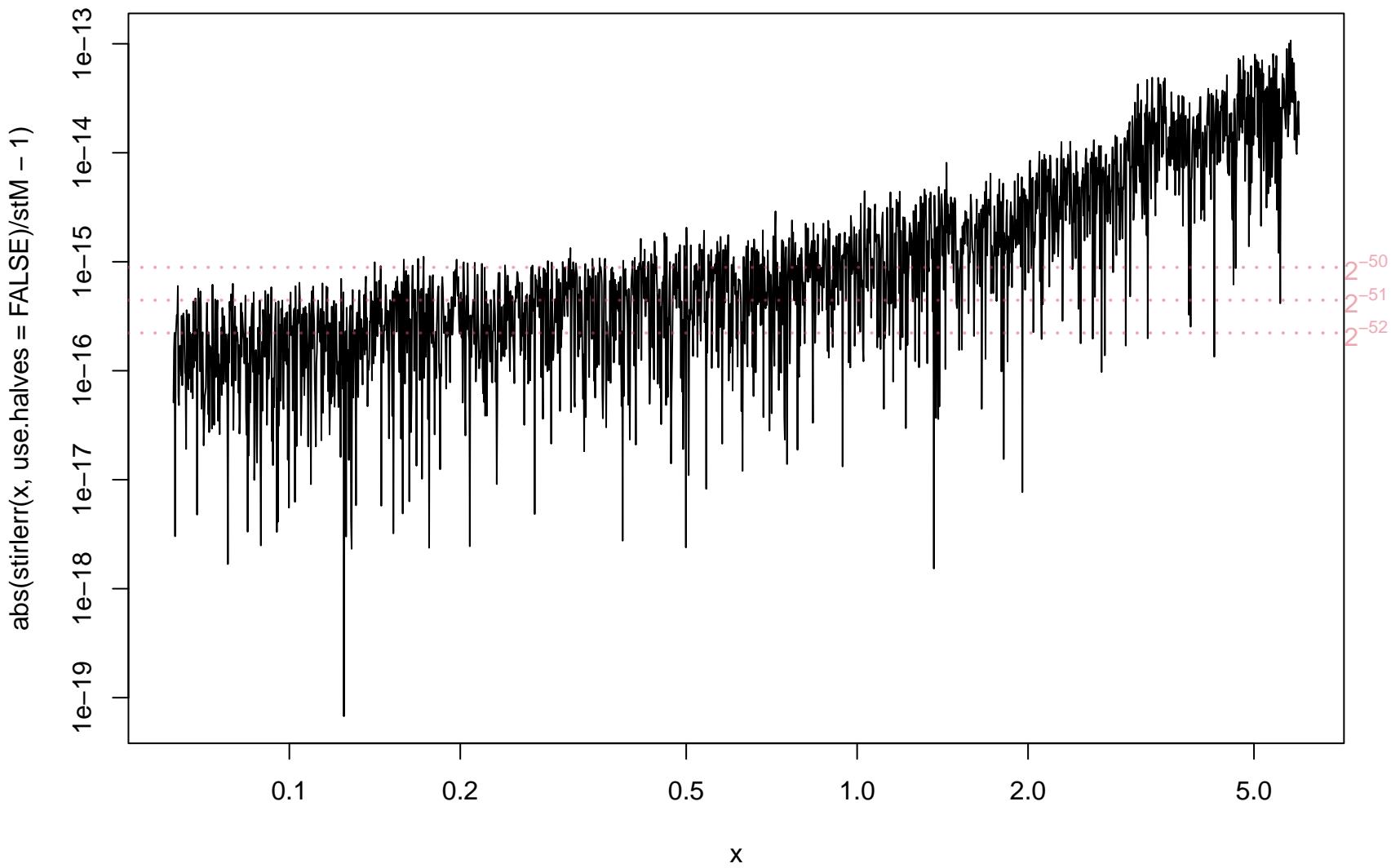
absolute Error

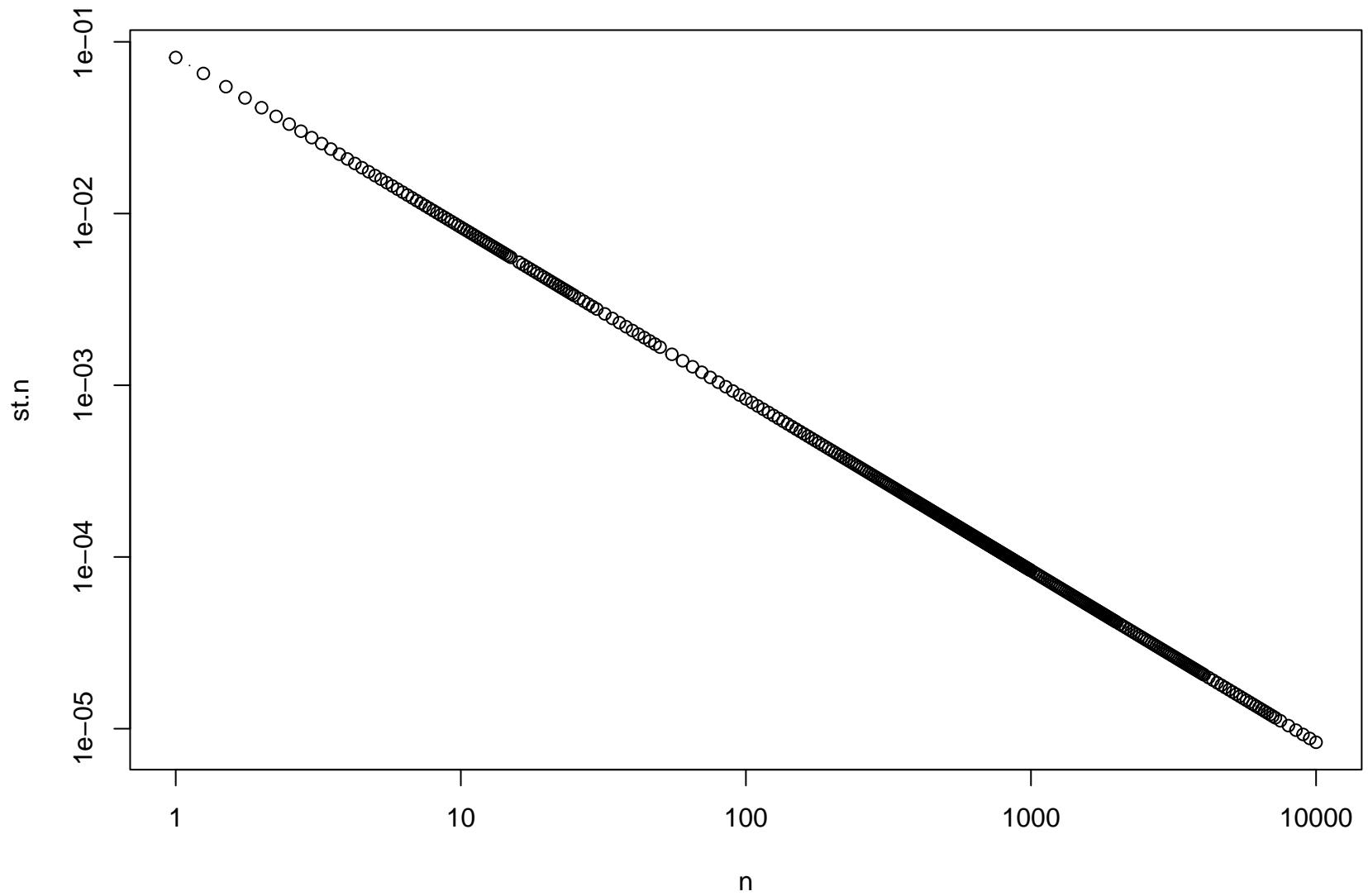


relative Error



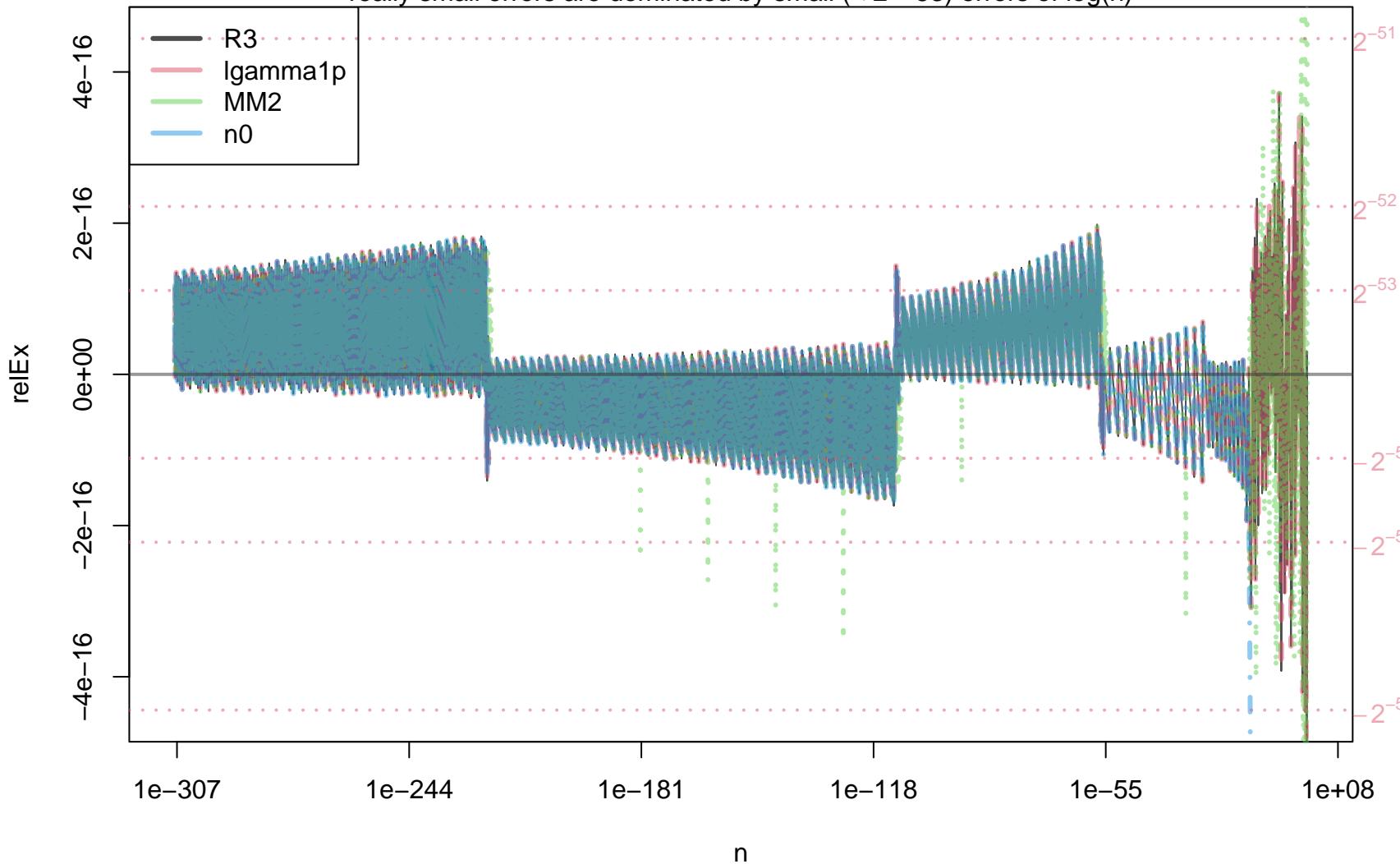
|relative Error|



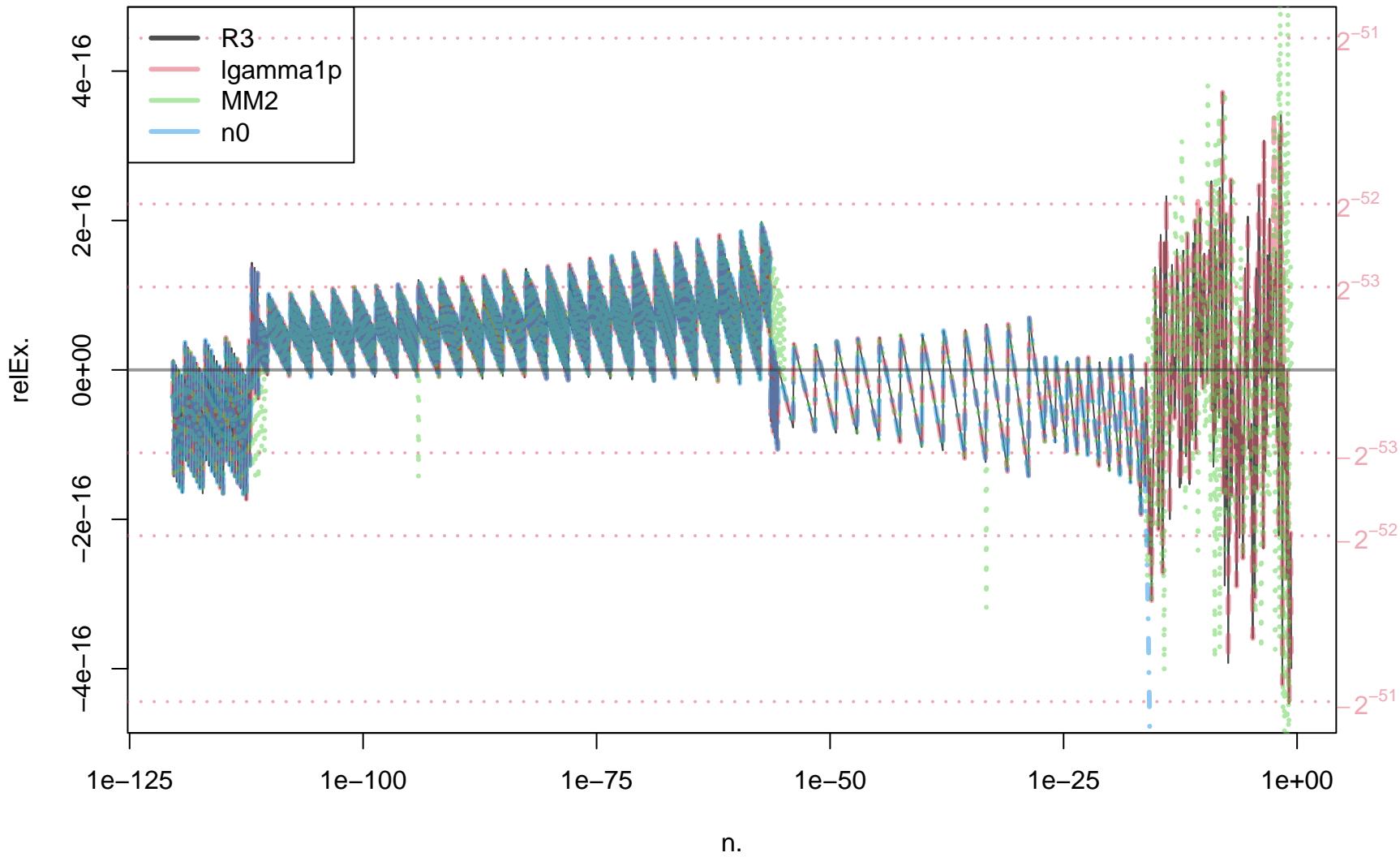


relative errors of direct (approx.) formula for stirlerr(n), small n

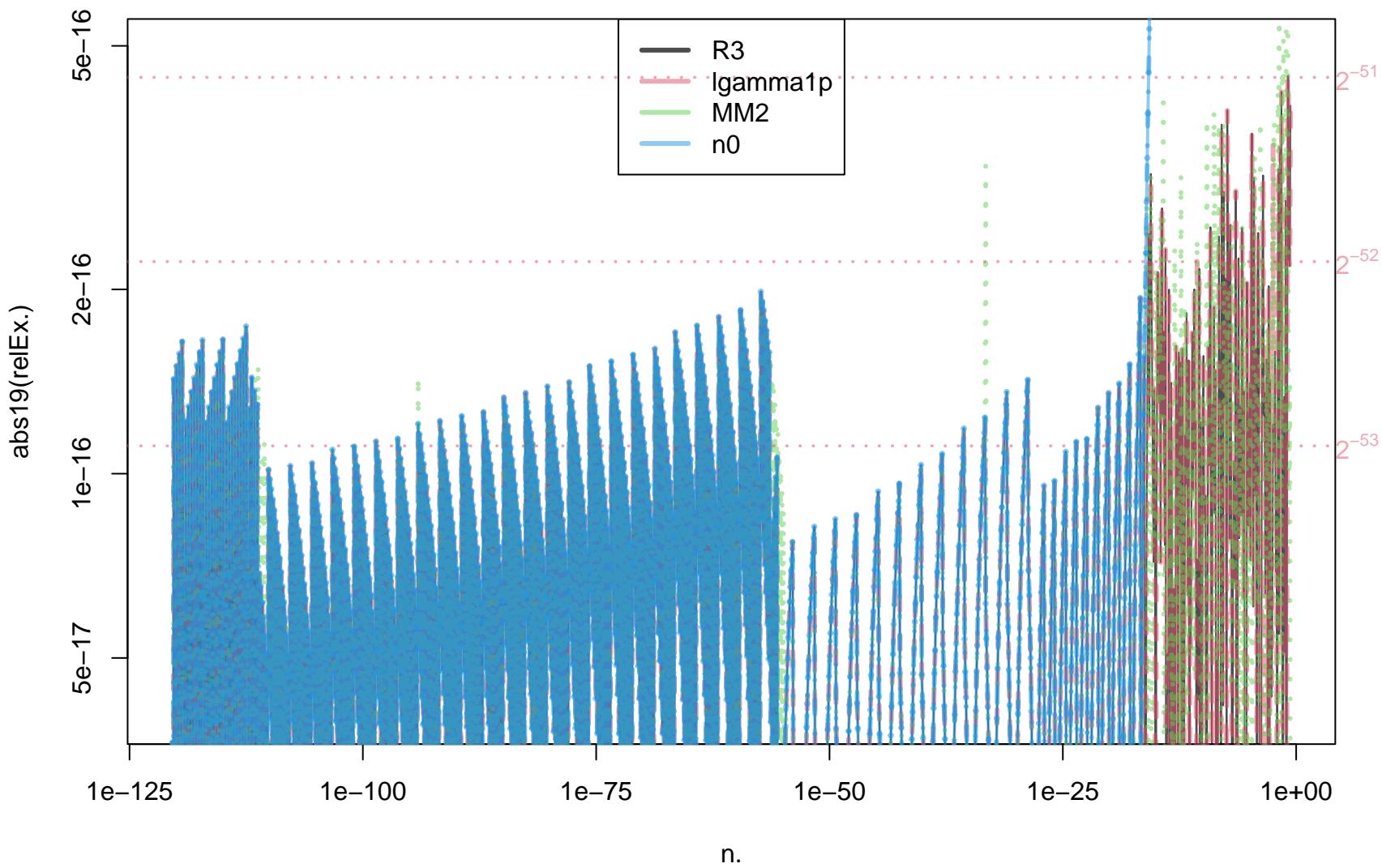
really small errors are dominated by small ($< 2^{-53}$) errors of $\log(n)$



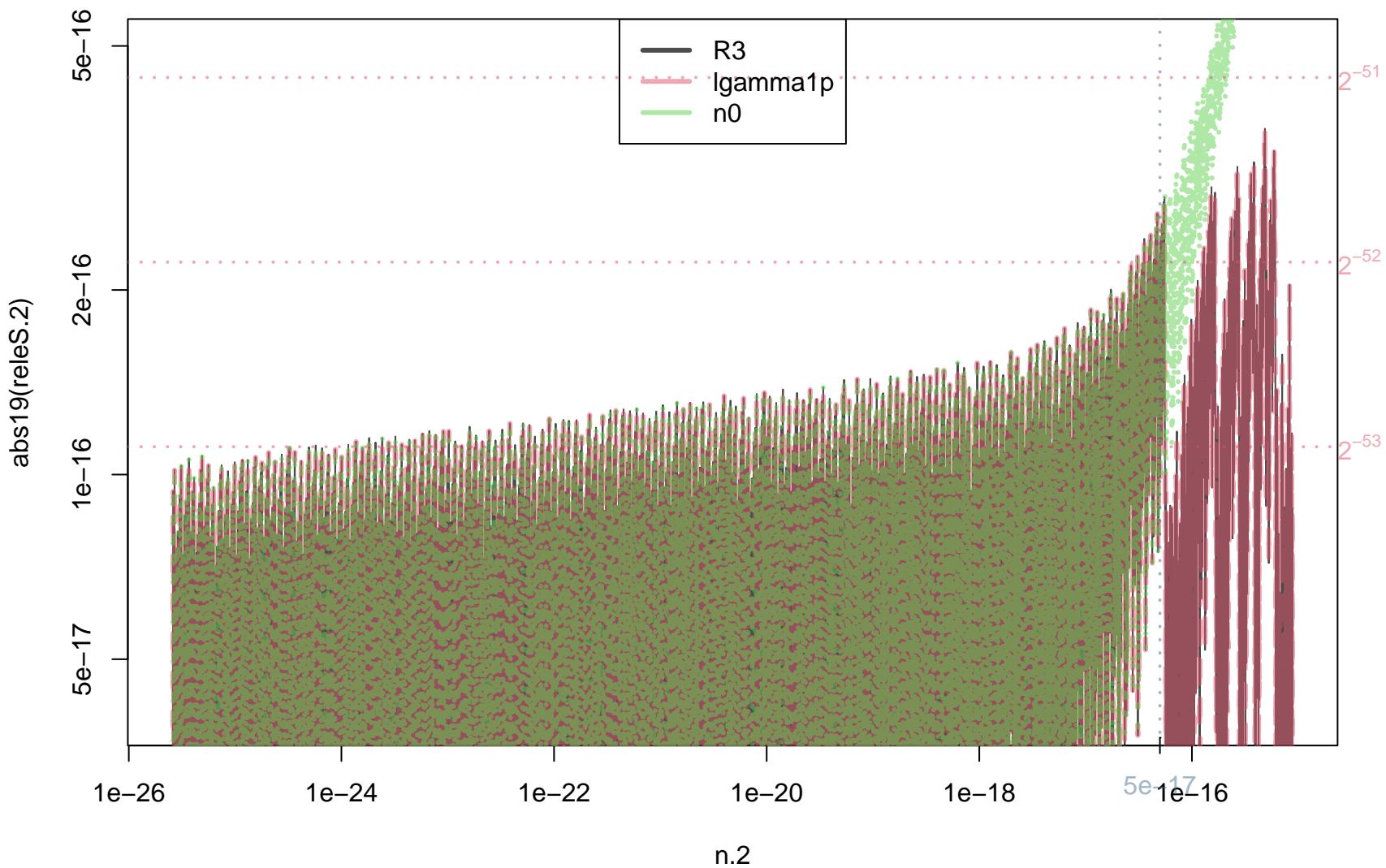
relative errors of direct (approx.) formula for stirlerr(n), small n



$$|\text{relErr}(\text{stirlerr_simpl}(n, *))|$$

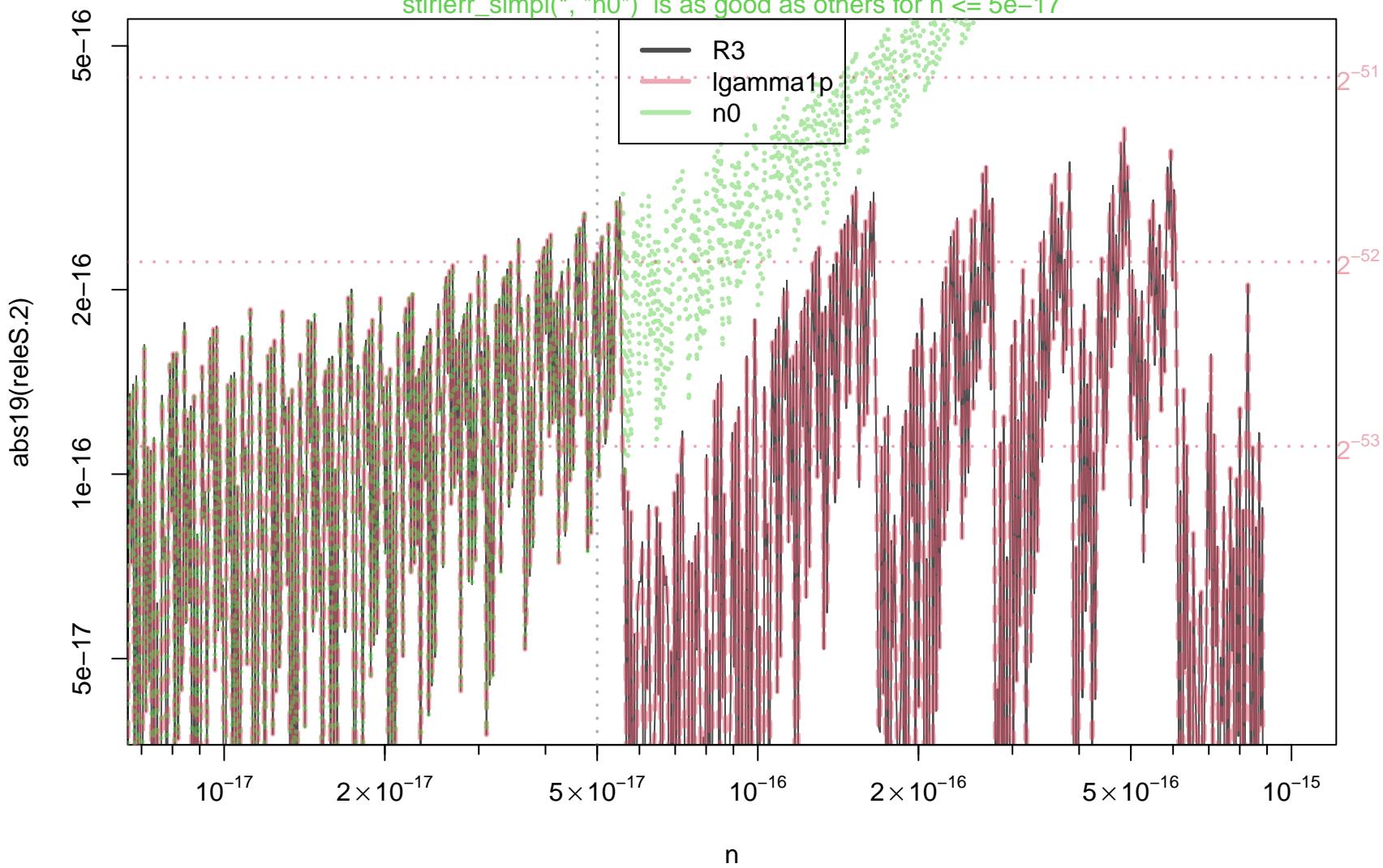


$|relErr(stirlerr_simpl(n, *))|$

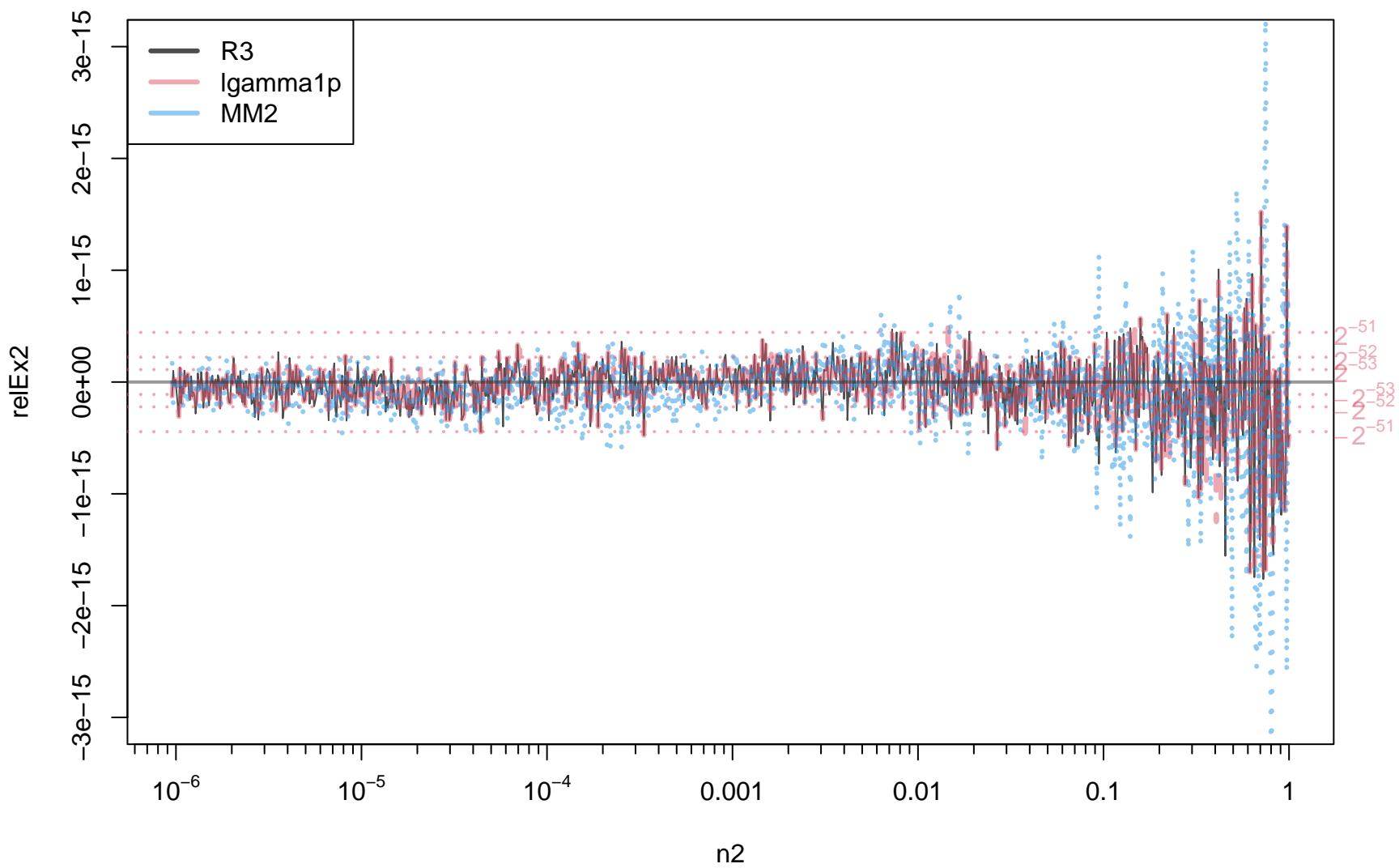


$|relErr(stirlerr_simpl(n, *))|$

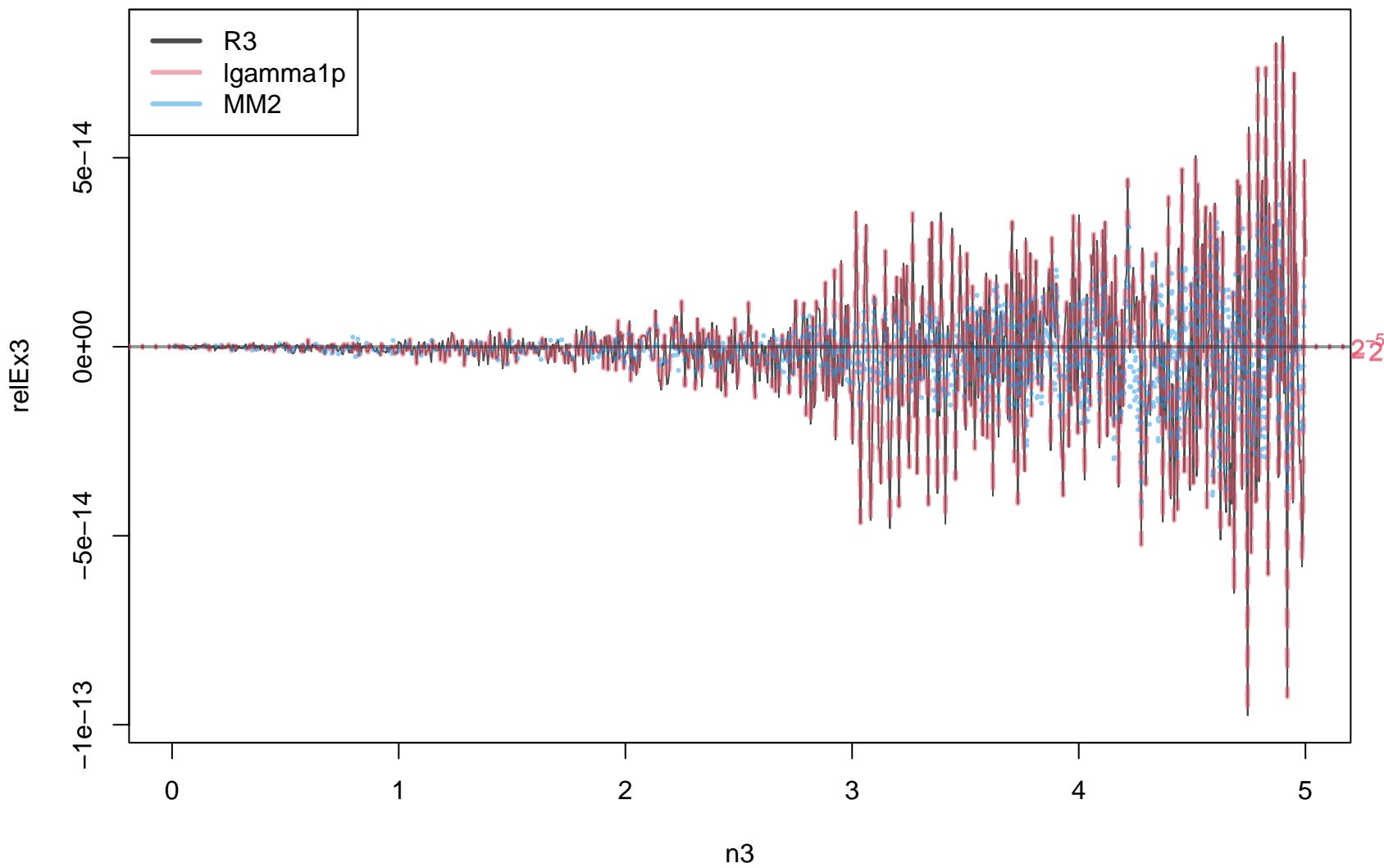
stirlerr_simpl(*, "n0") is as good as others for $n \leq 5e-17$



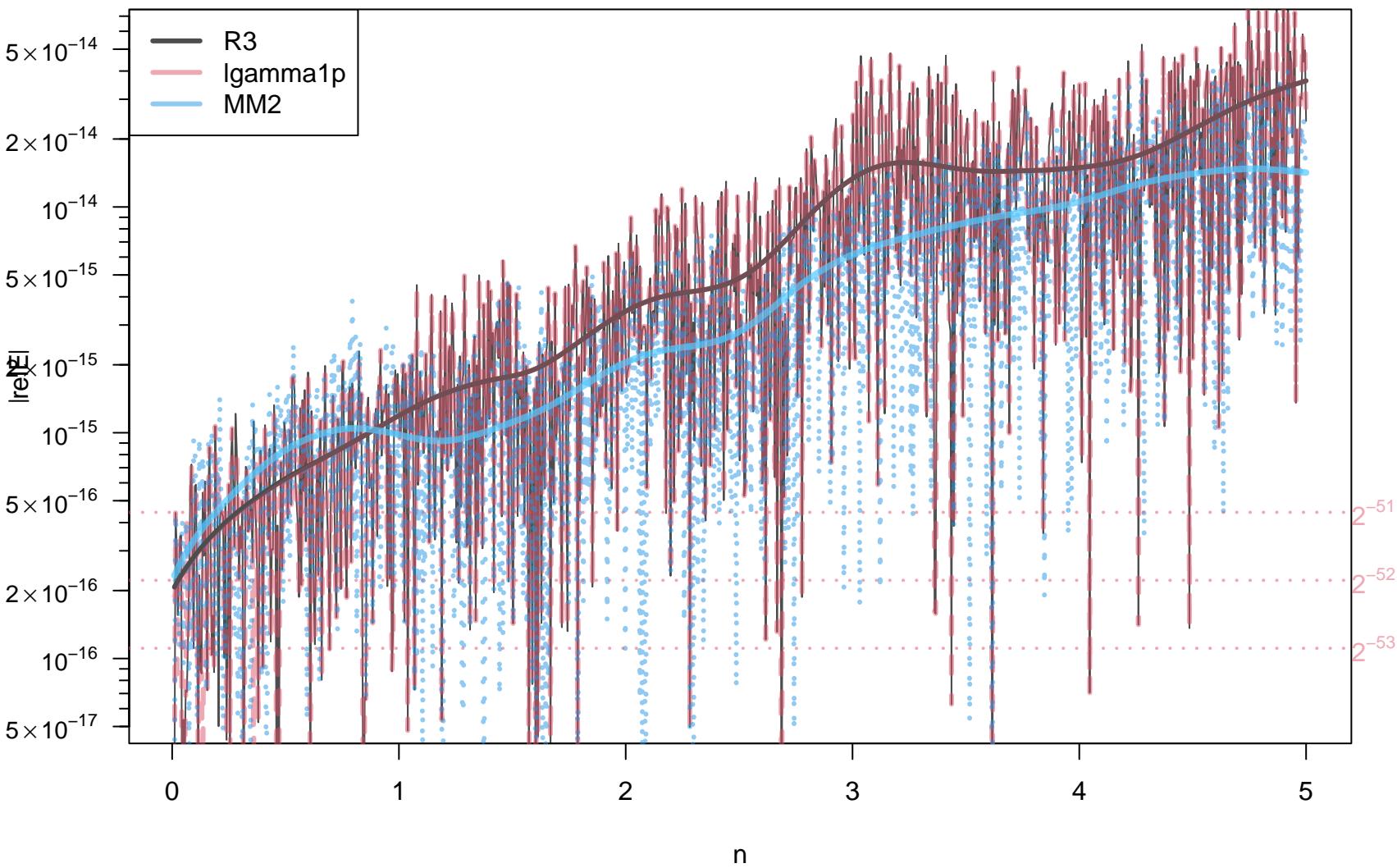
relative errors of direct (approx.) formula for stirlerr(n), small n

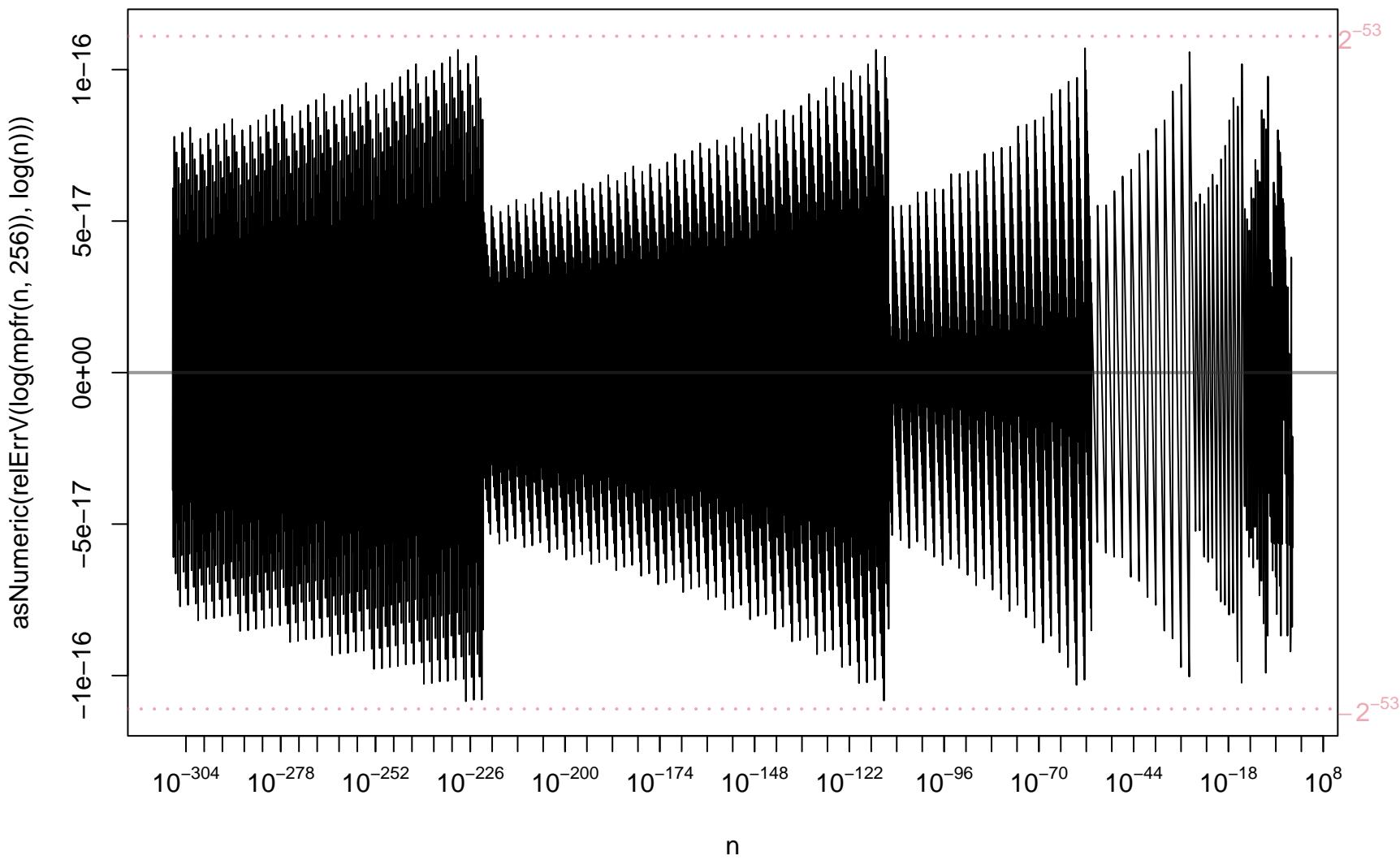


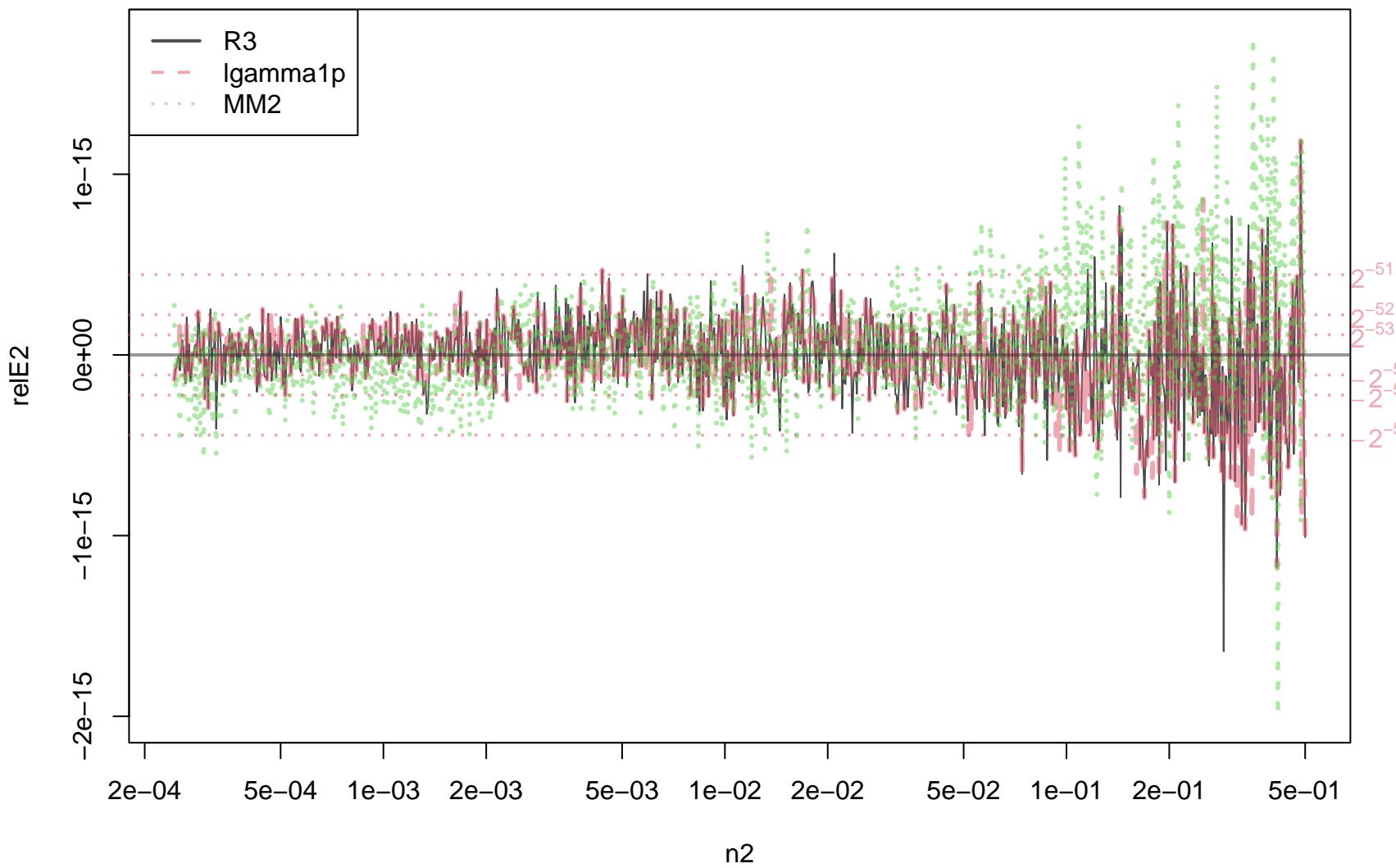
relative errors of direct (approx.) formula for stirlerr(n), small n

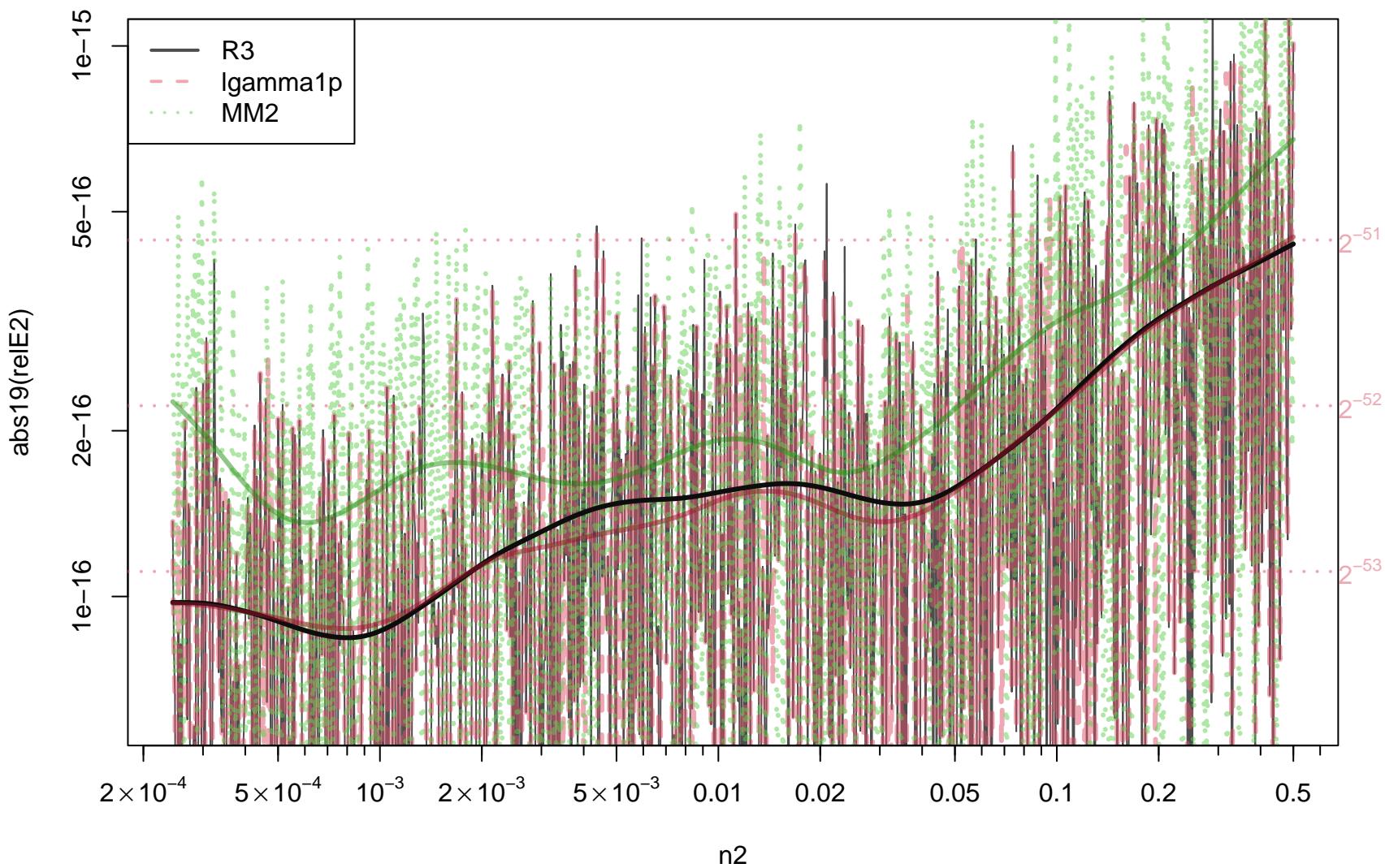


$| \text{relative errors} |$ of direct (approx.) formula for stirlerr(n), small n



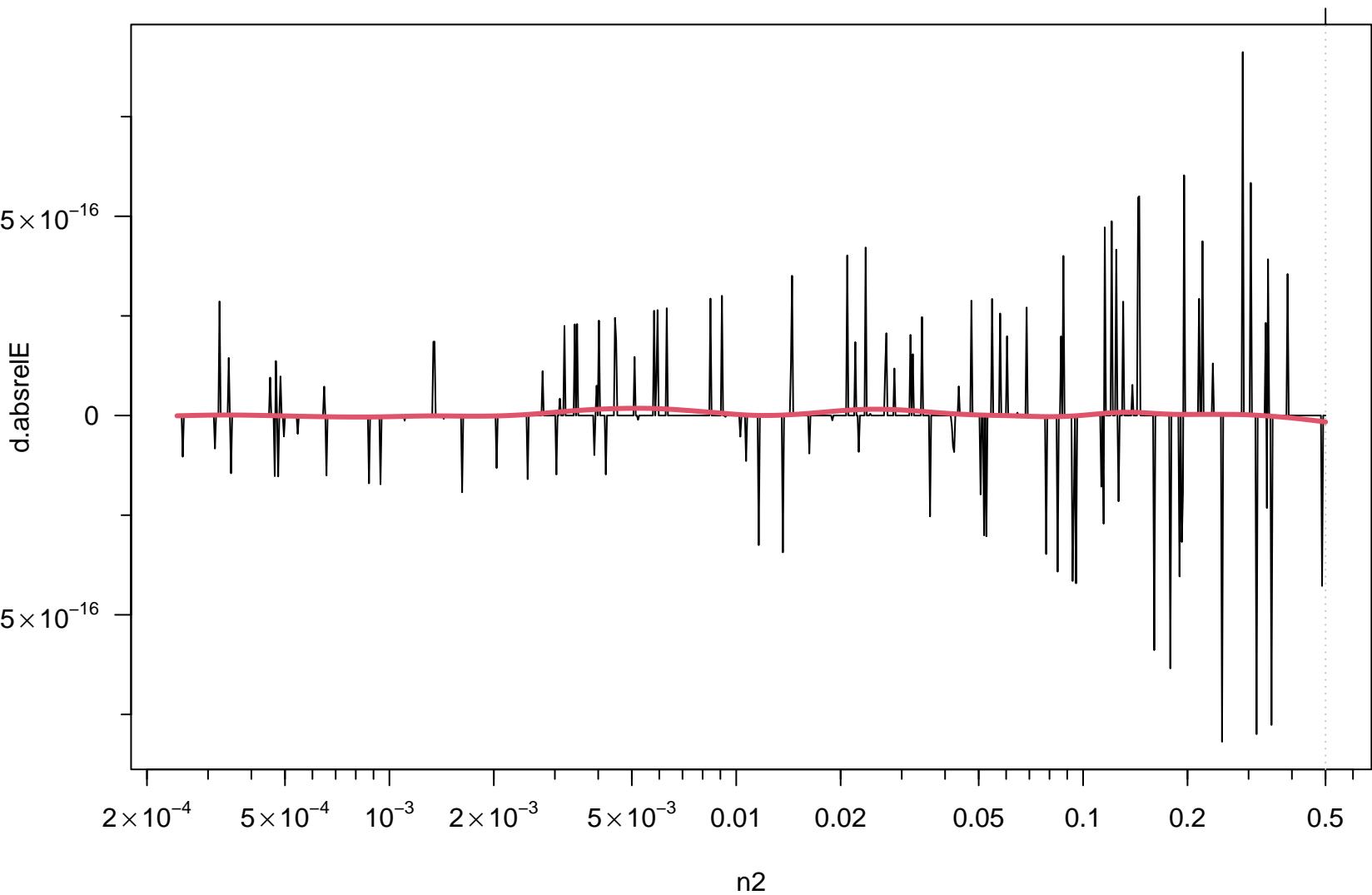




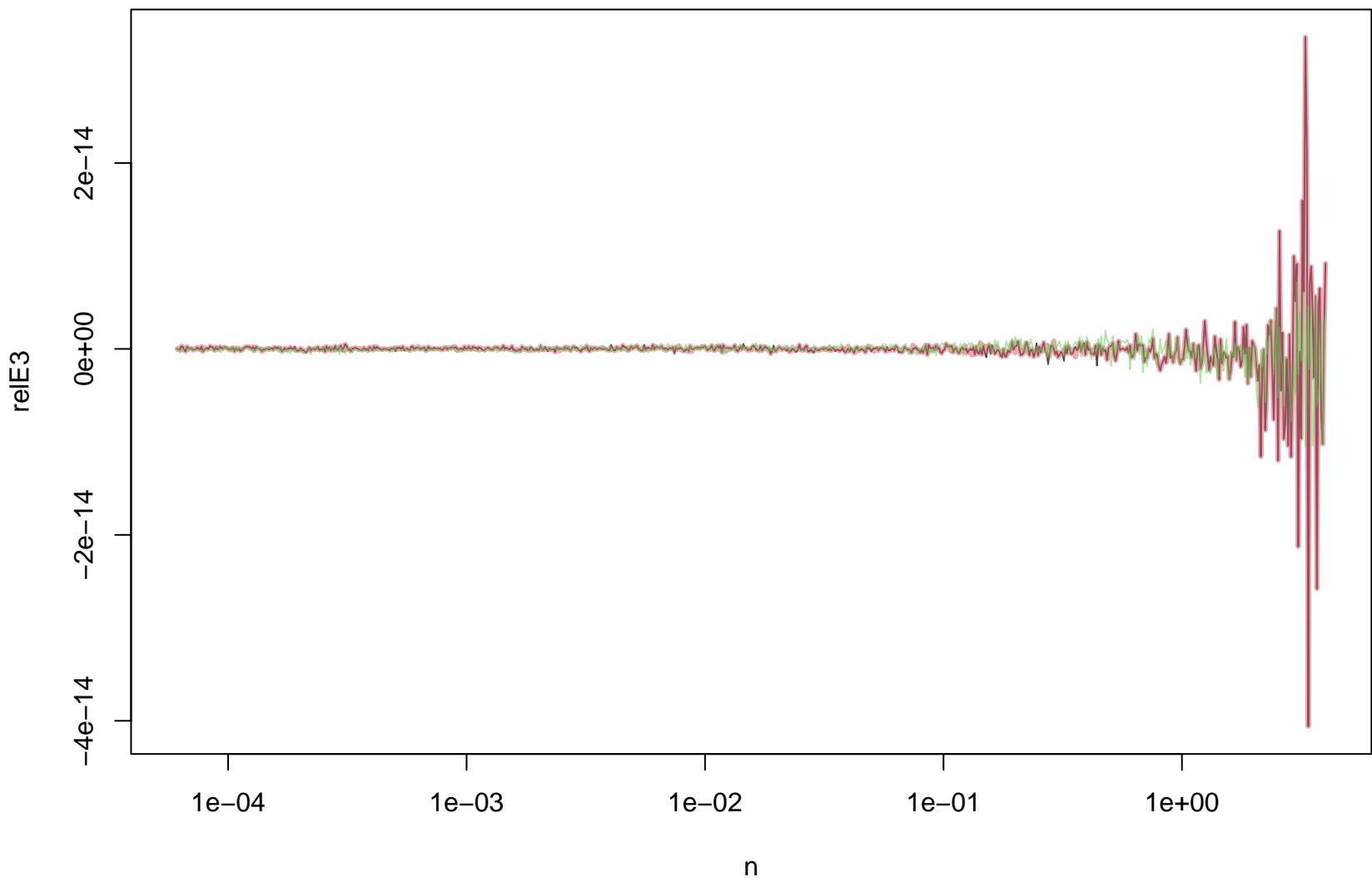


$|relE_R3| - |relE_Igamma1p|$

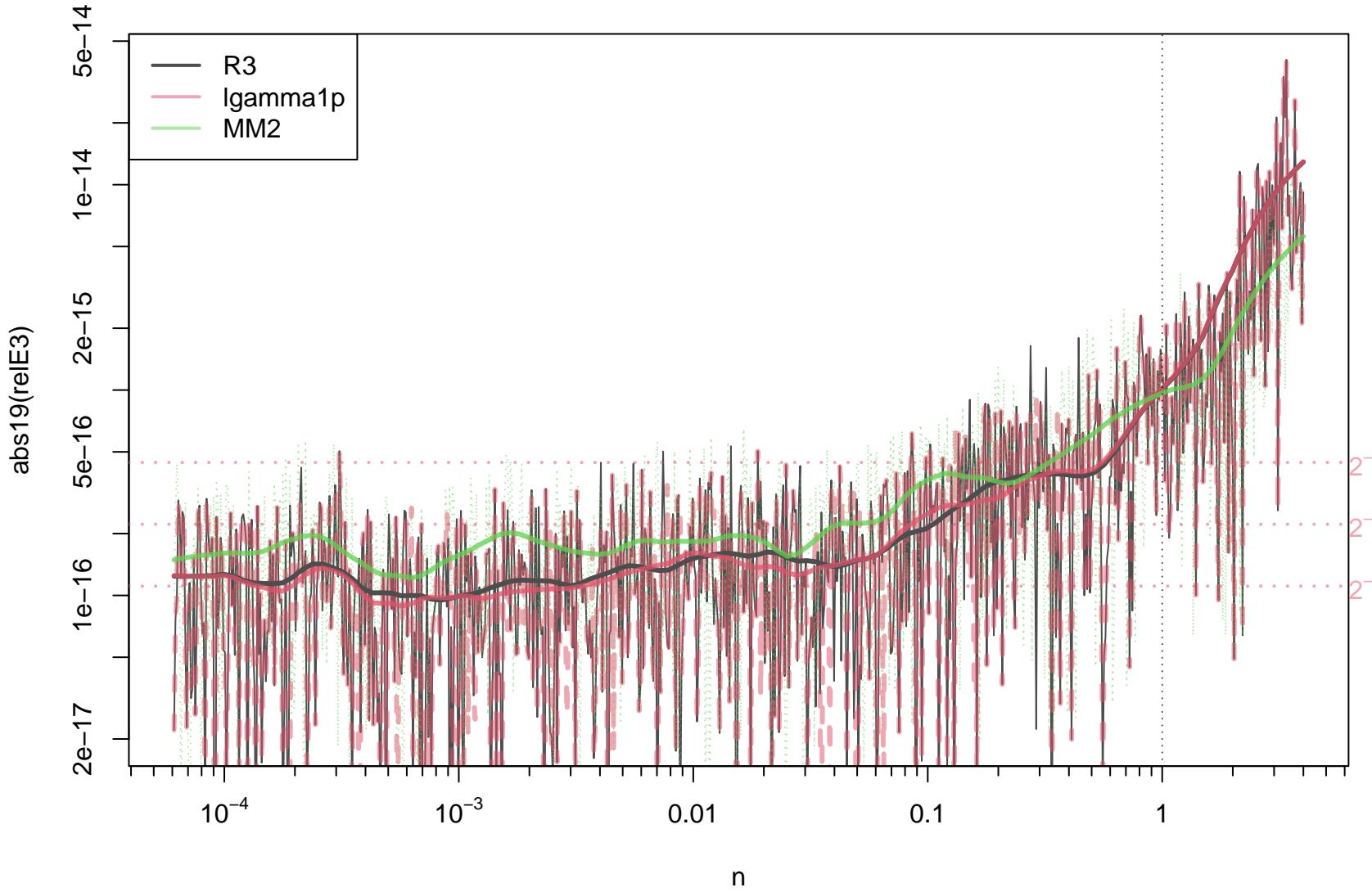
0.5



rel.lgam1(n)

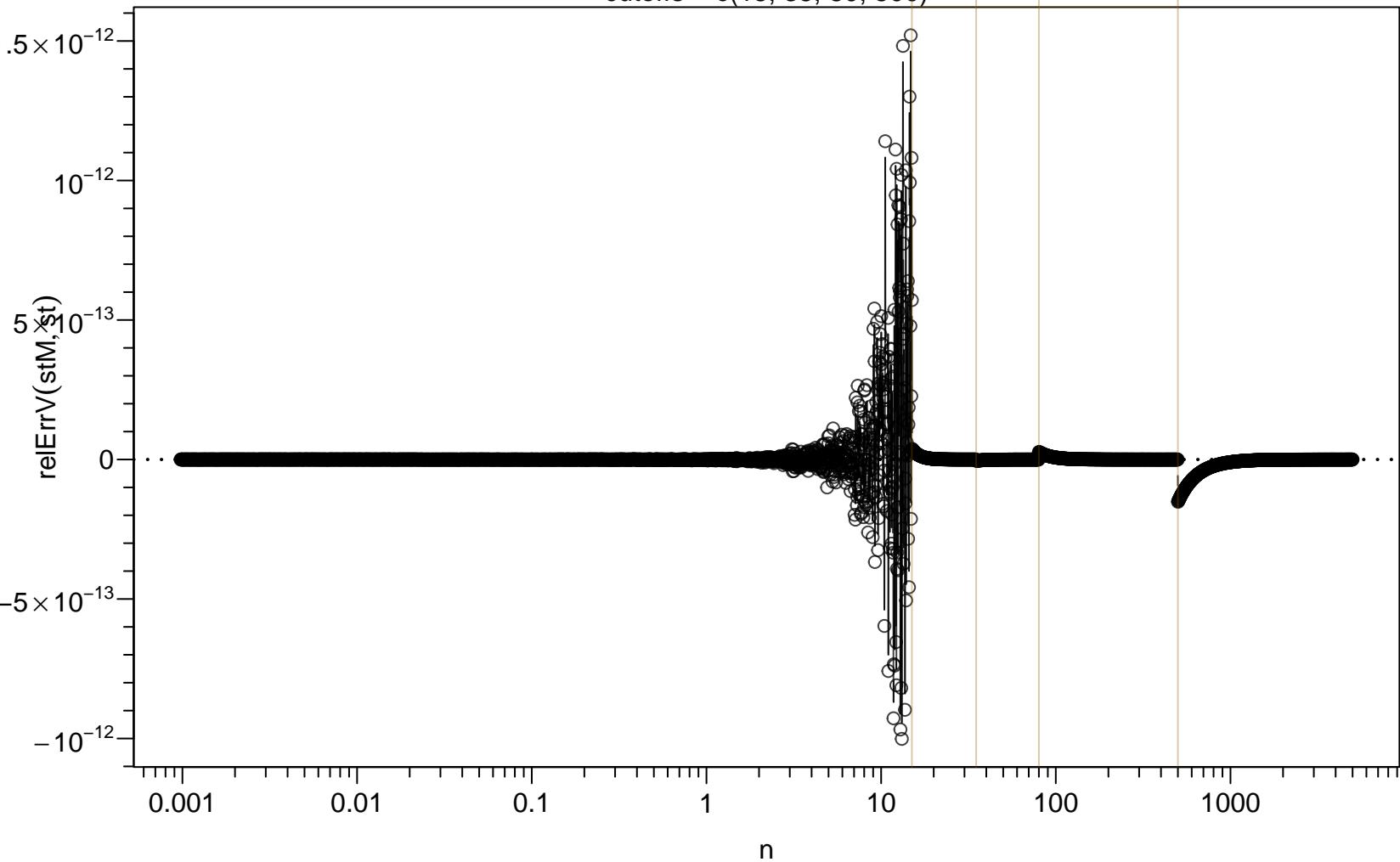


$|rel.lgam1(n)|$



stirlerr(n, cutoffs) rel.error [wrt stirlerr(Rmpfr::mpfr(n, 512))]

cutoffs = c(15, 35, 80, 500)



stirlerr(n, cutoffs) rel.error [wrt stirlerr(Rmpfr::mpfr(n, 512))]

cutoffs = c(15, 35, 80, 500)

