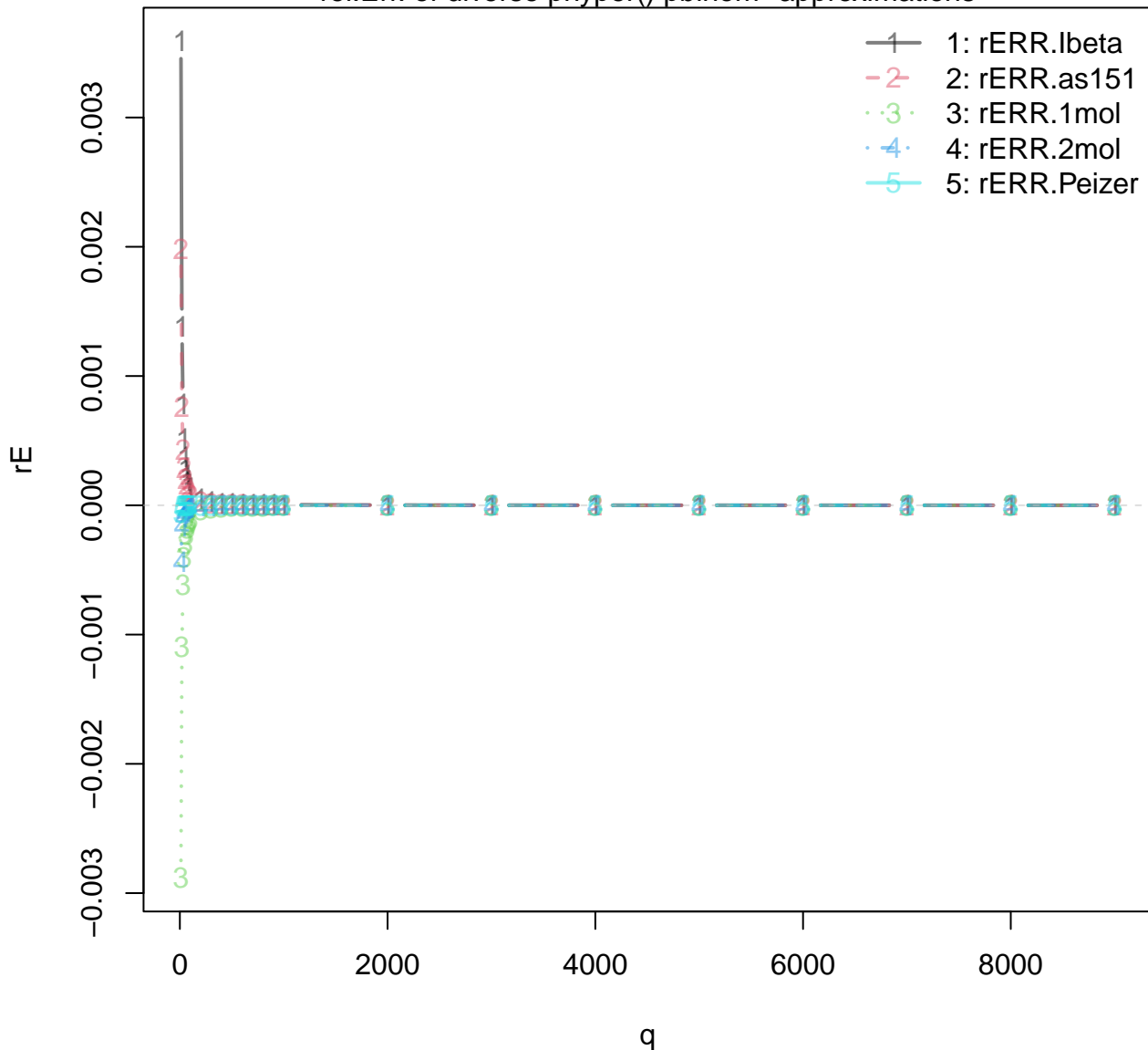


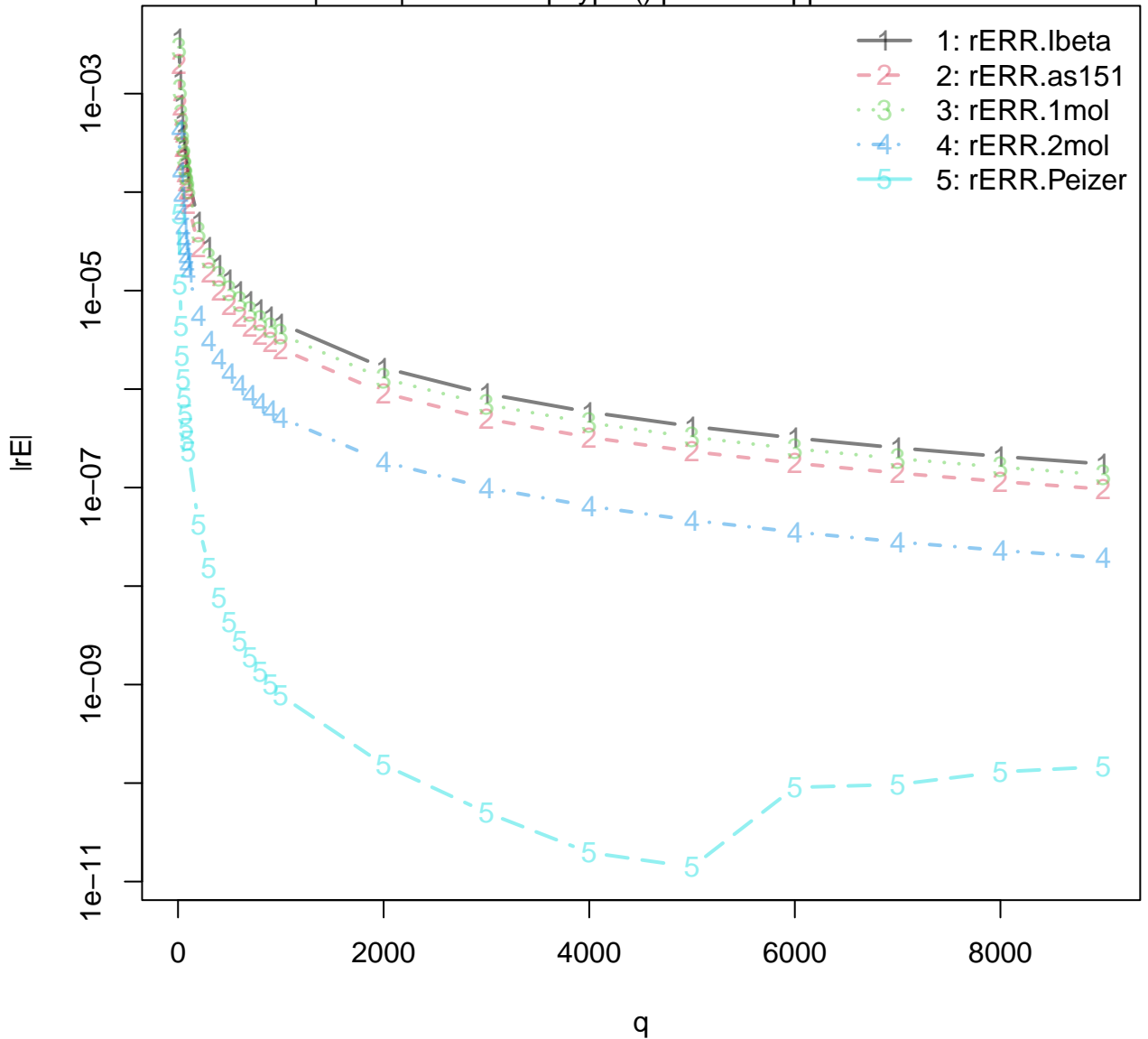
# phyper( $q = k, 2 * k, 2 * k, 2 * k$ )

rel.Err. of diverse phyper() pbinom\* approximations



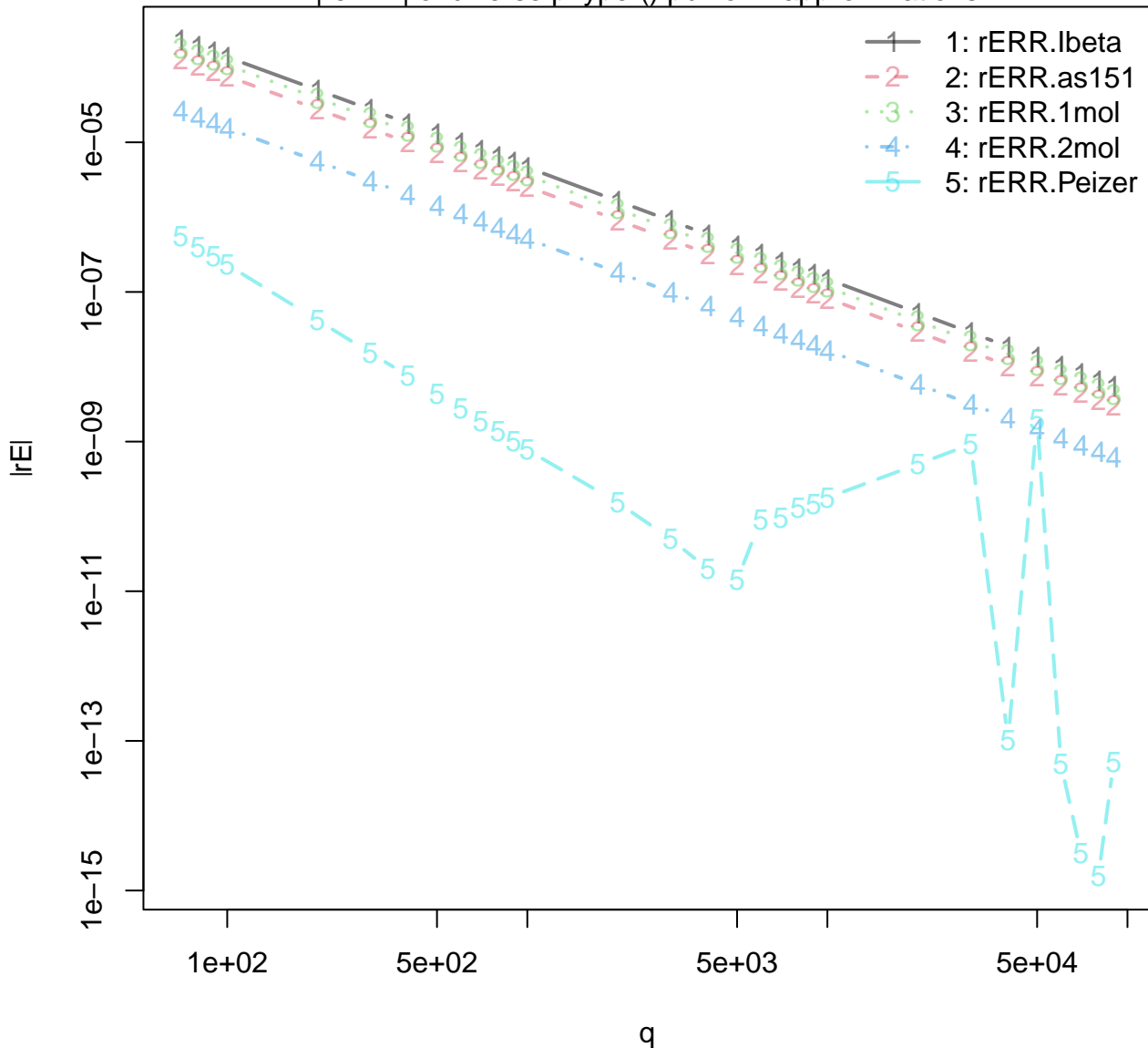
# phyper(q = k, 2 \* k, 2 \* k, 2 \* k, abslog = TRUE)

|rel.Err| of diverse phyper() pbinom\* approximations



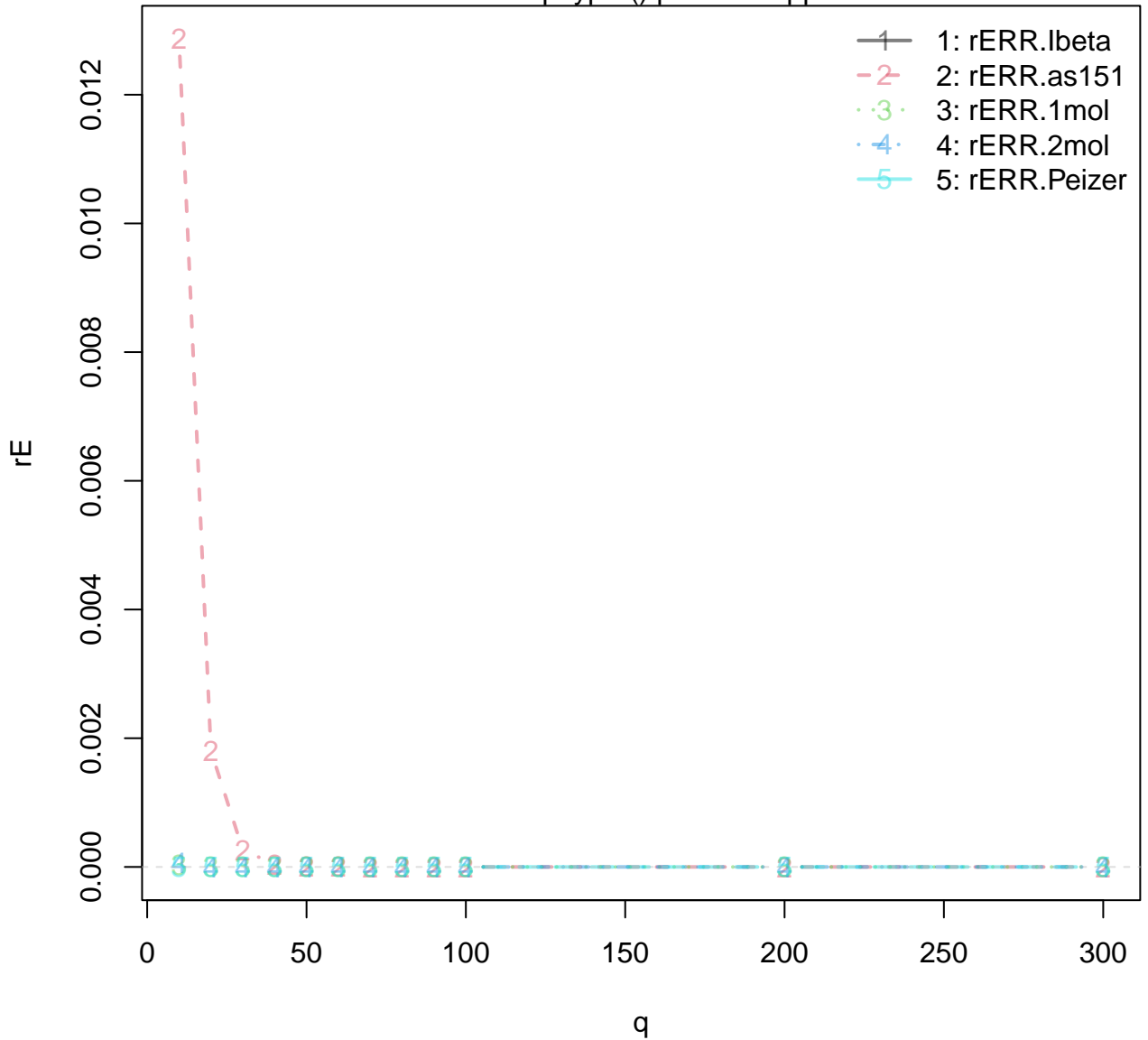
**phyper(q = k, 2 \* k, 2 \* k, 2 \* k, abslog = TRUE, logx = "x")**

|rel.Err| of diverse phyper() pbinom\* approximations



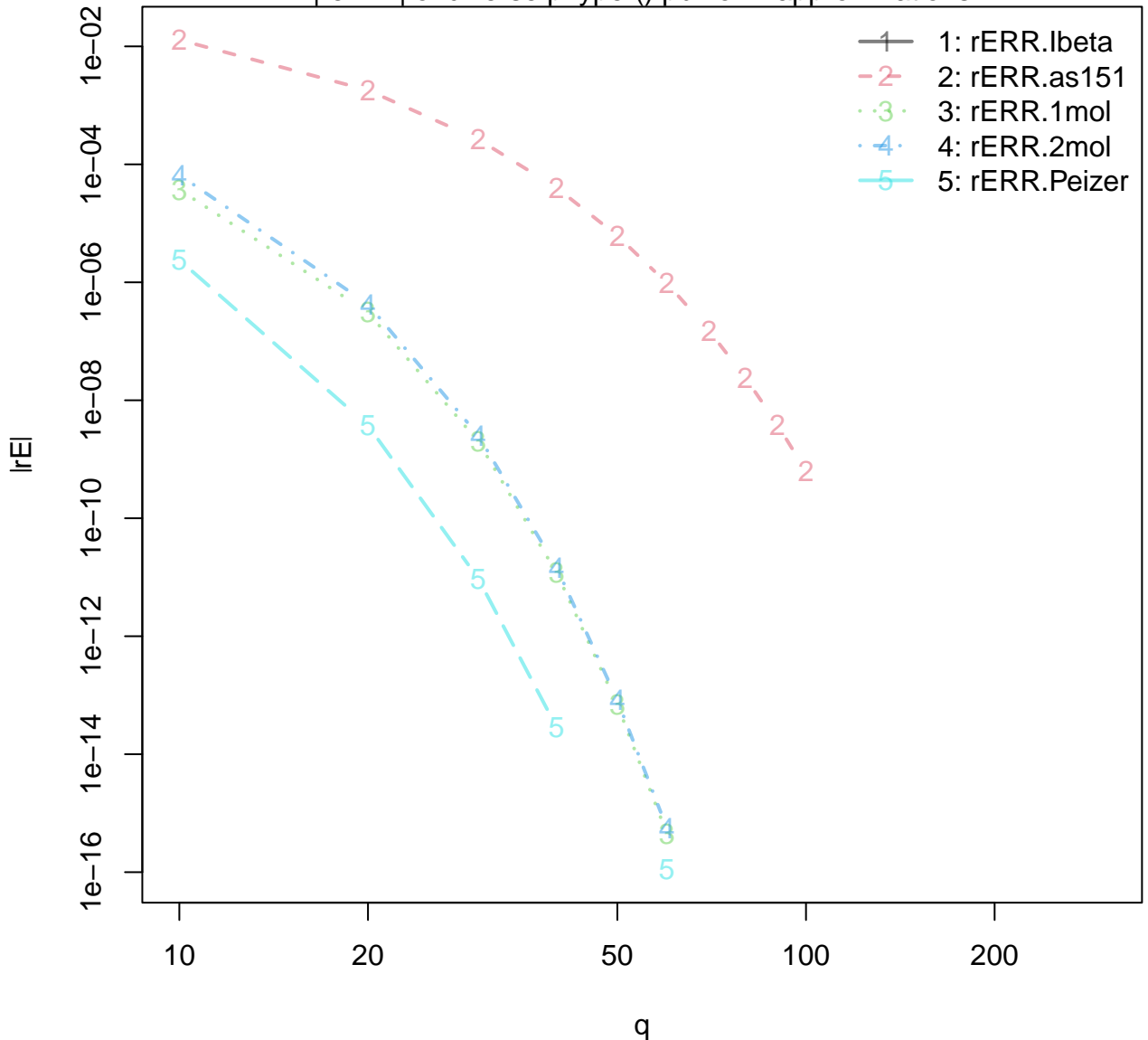
# phyper( $q = k, 1.2 * k, 2 * k, 1.5 * k$ )

rel.Err. of diverse phyper() pbinom\* approximations



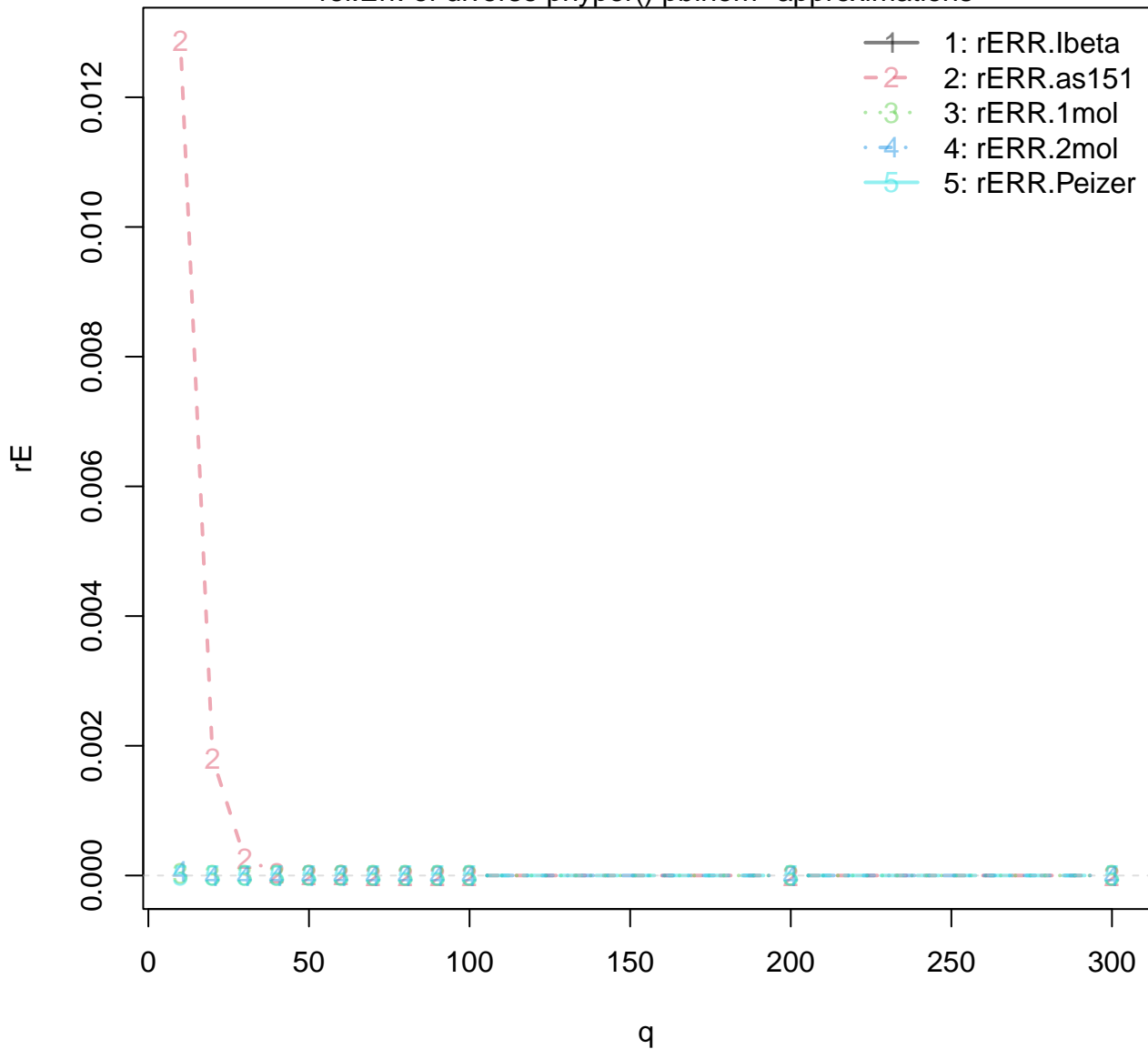
hyper(q = k, 1.2 \* k, 2 \* k, 1.5 \* k, abslog = TRUE, logx = "x")

|rel.Err| of diverse hyper() pbinom\* approximations



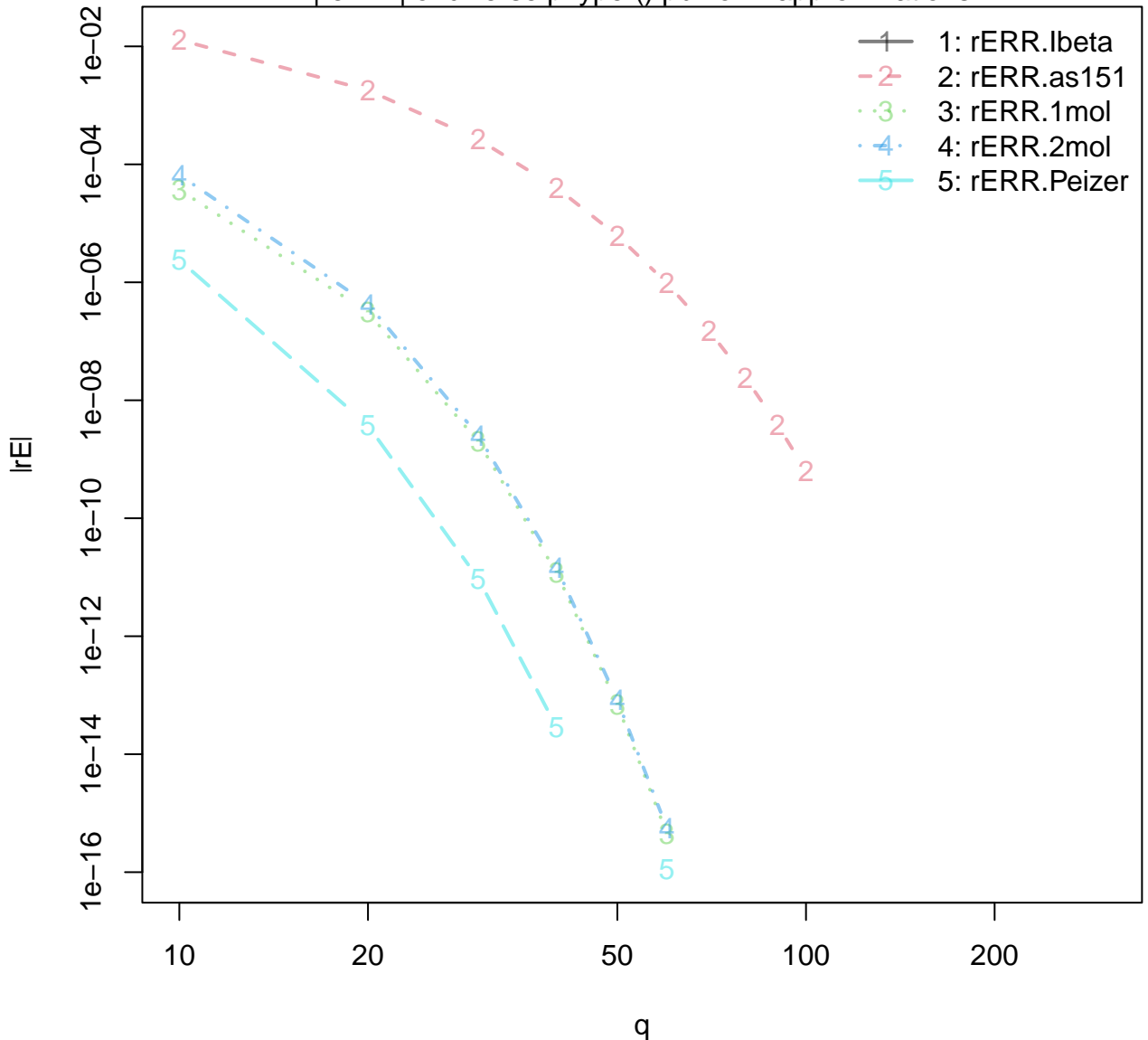
# phyper( $q = k, 1.2 * k, 2 * k, 1.5 * k$ )

rel.Err. of diverse phyper() pbinom\* approximations



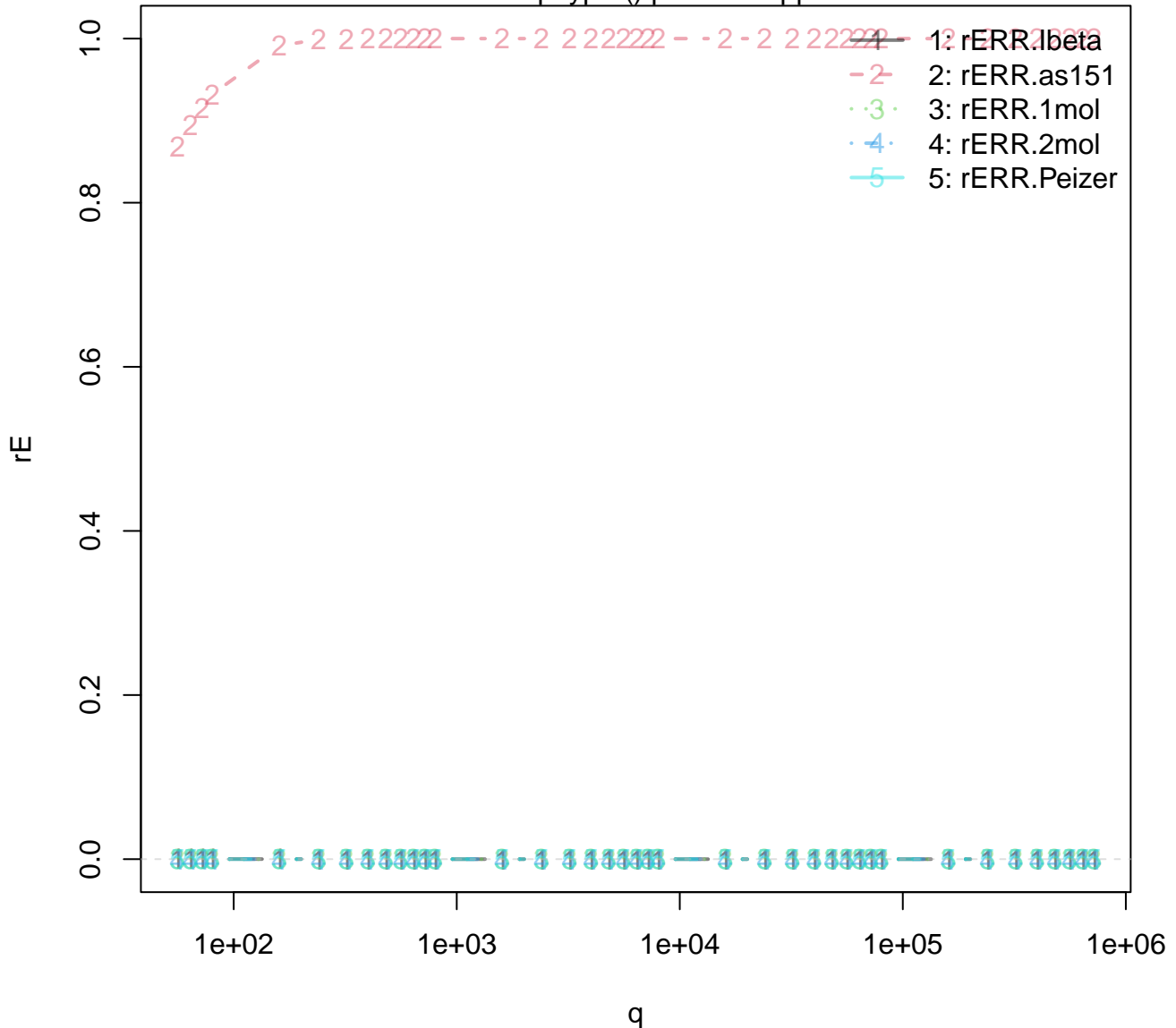
hyper(q = k, 1.2 \* k, 2 \* k, 1.5 \* k, abslog = TRUE, logx = "x")

|rel.Err| of diverse hyper() pbinom\* approximations



# phyper(q = x, 1.6 \* k, 2 \* k, 1.8 \* k, logx = "x")

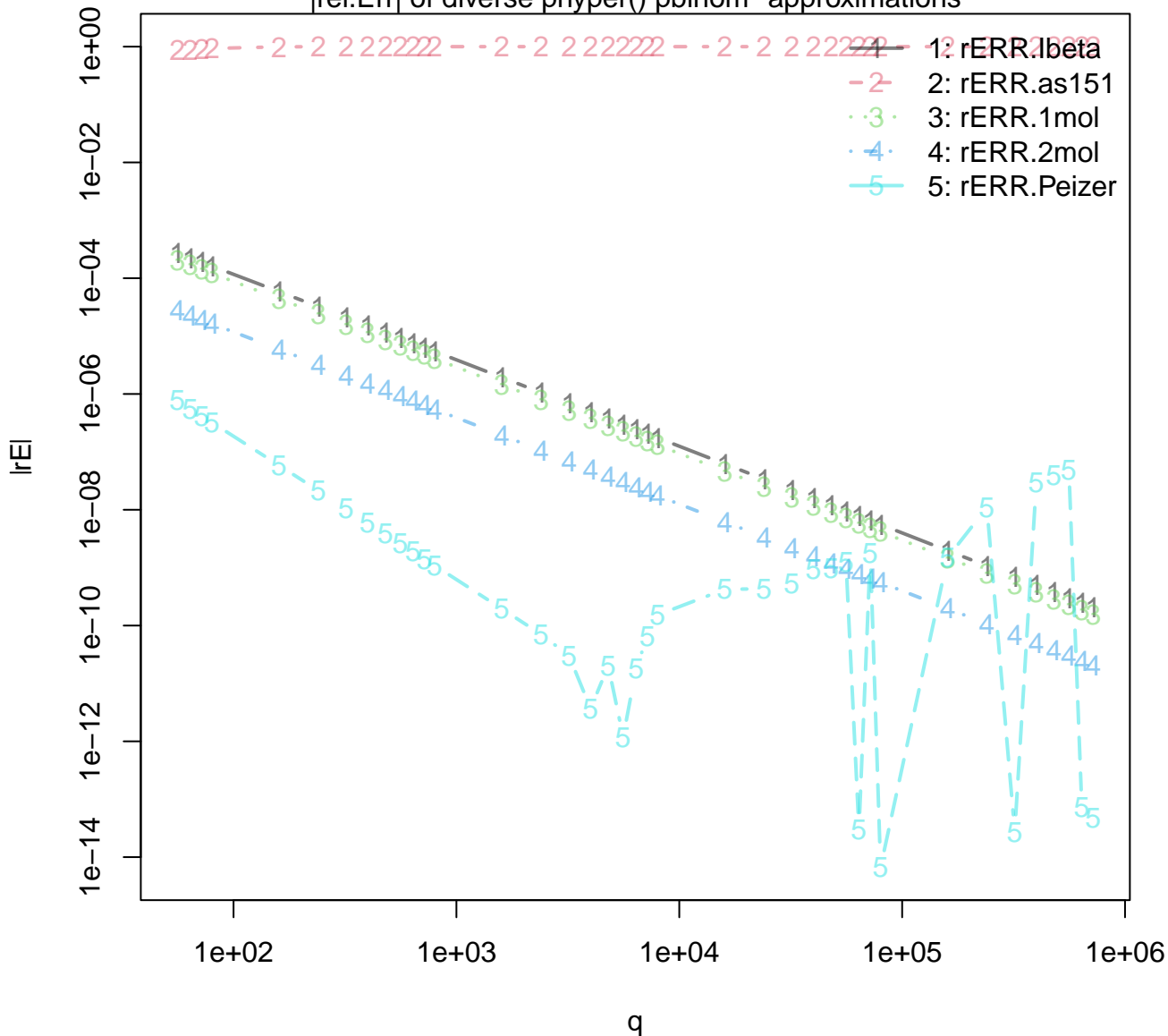
rel.Err. of diverse phyper() pbinom\* approximations



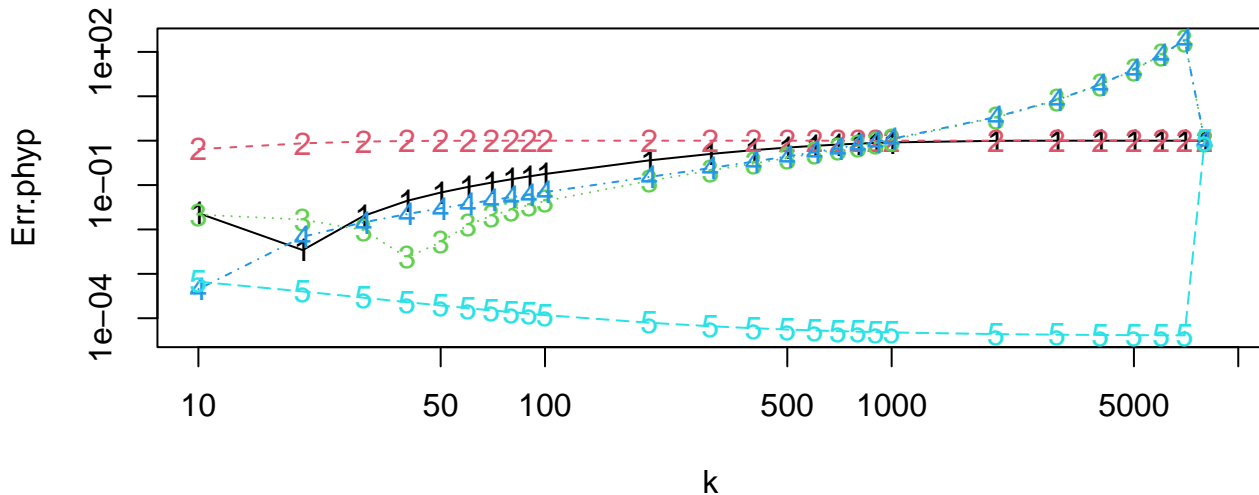


phyper(q = x, 1.6 \* k, 2 \* k, 1.8 \* k, abslog = TRUE, logx = "x")

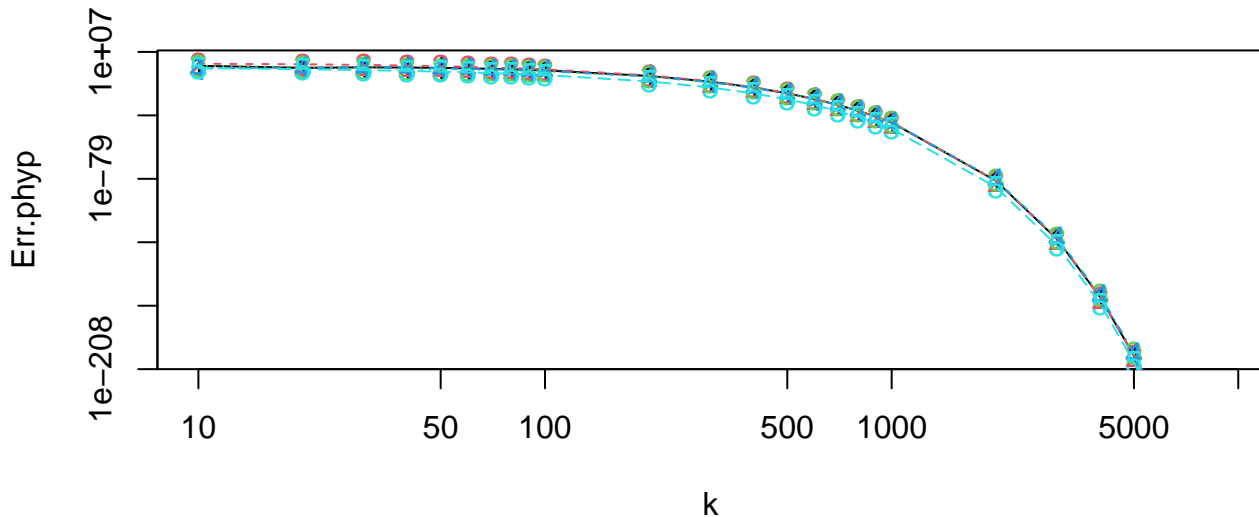
|rel.Err| of diverse phyper() pbinom\* approximations



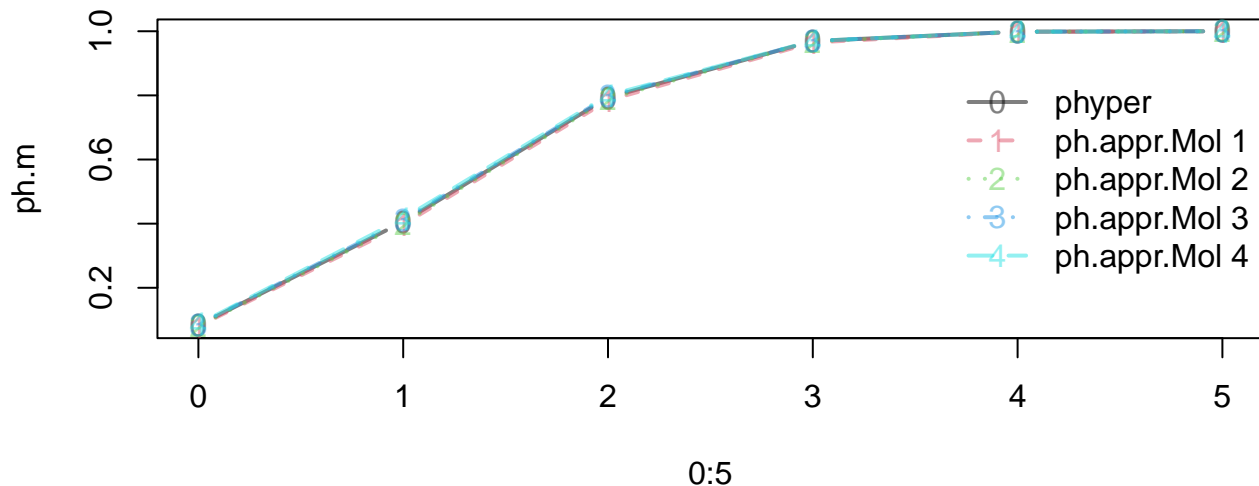
$|\text{relE.}\{\text{phyper}(x = 0.6k, 1.6k, 2k, 1.8k)\}|$



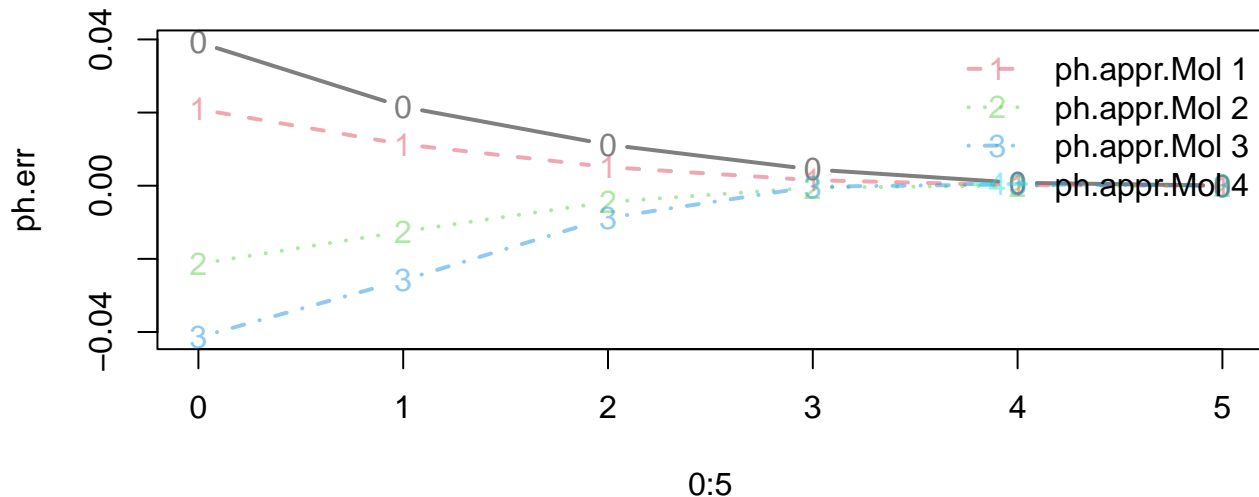
$|\text{relE.}\{\text{phyper}(x = 0.6k, 1.6k, 2k, 1.8k)\}|$



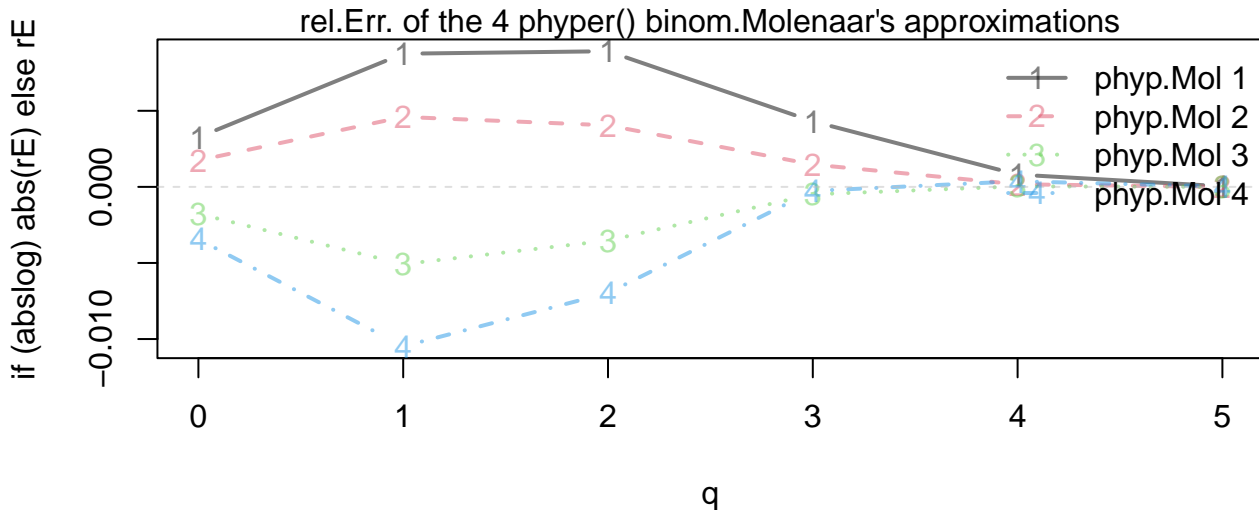
## all 4 phyper() binomial approximations via Molenaar's



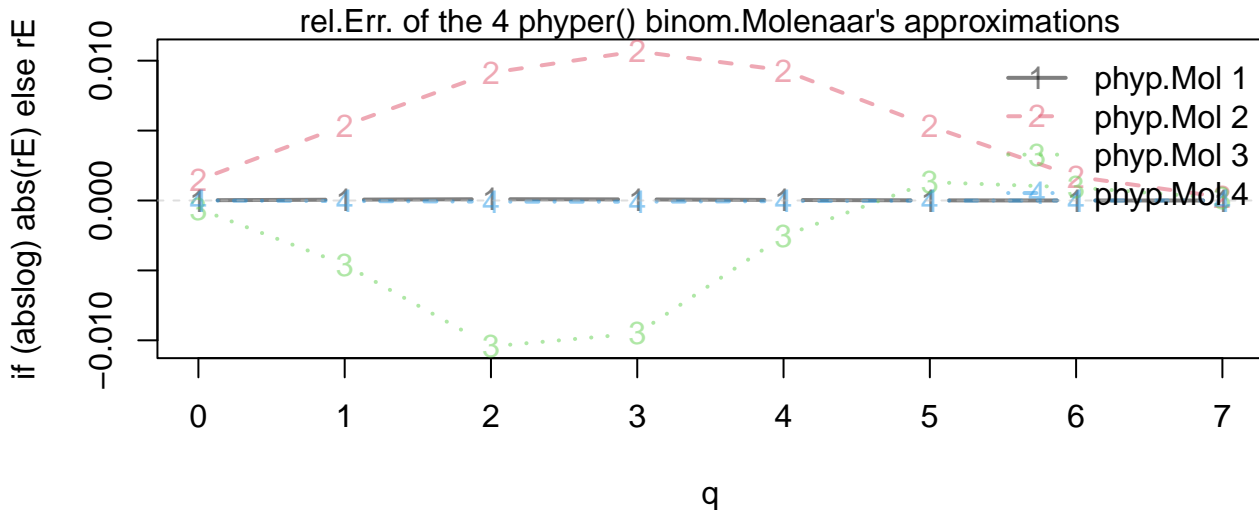
## rel.Err. of the 4 phyper() binom.Molenaar's approximations



### phyper(\*, m = 5, n = 15, k = 7)

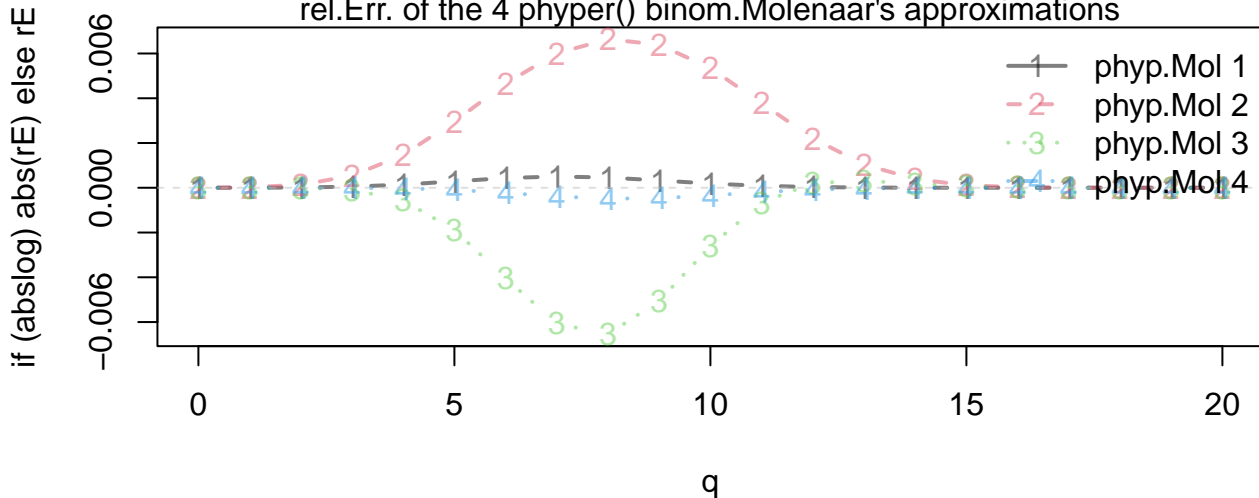


### phyper(\*, m = 70, n = 100, k = 7)



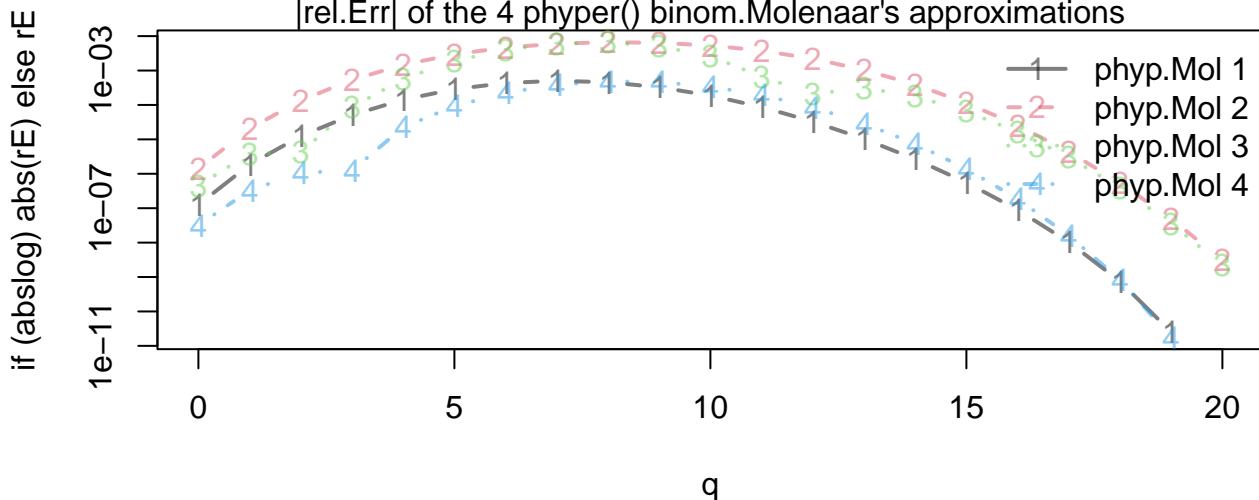
### phyper(\*, m = 70, n = 100, k = 20)

rel.Err. of the 4 phyper() binom.Molenaar's approximations



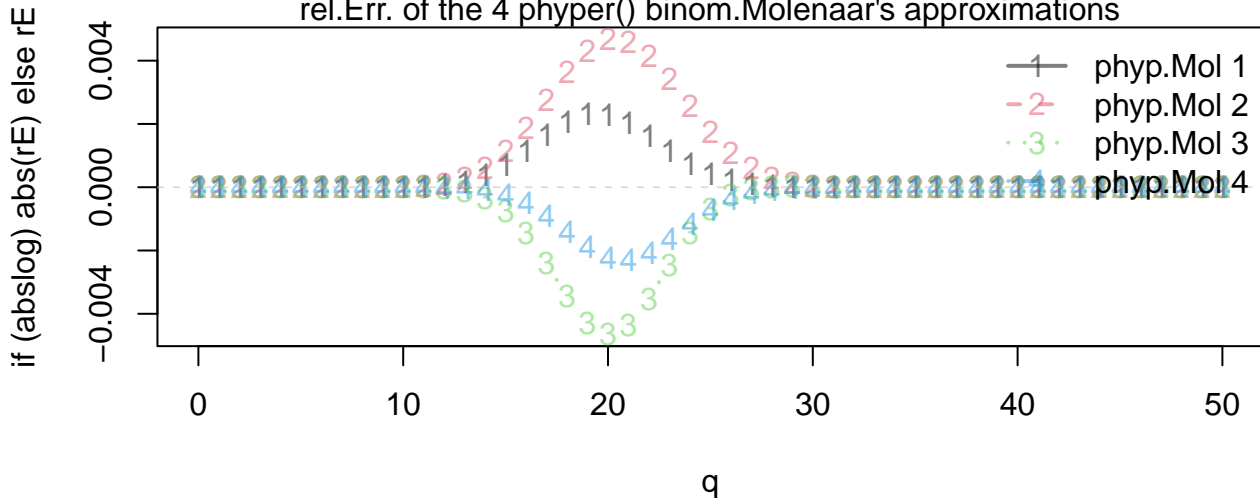
### phyper(\*, m = 70, n = 100, k = 20)

|rel.Err| of the 4 phyper() binom.Molenaar's approximations



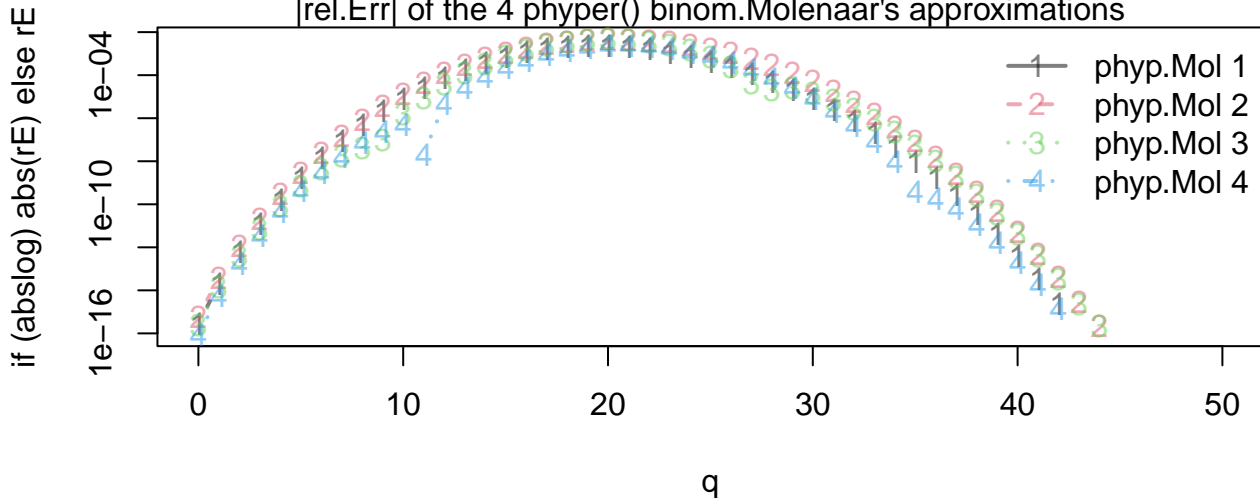
### phyper(\*, m = 70, n = 100, k = 50)

rel.Err. of the 4 phyper() binom.Molenaar's approximations



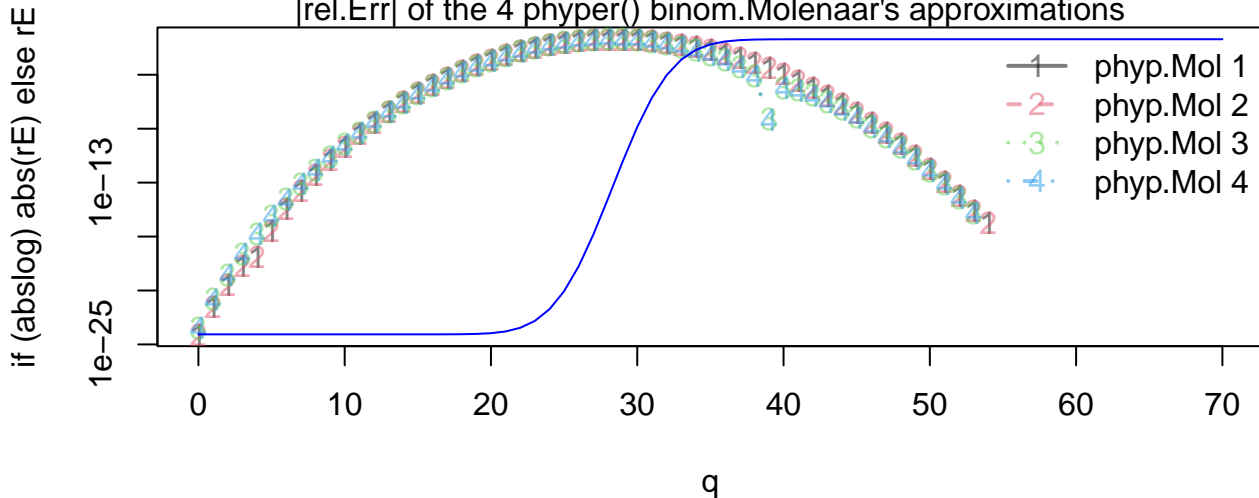
### phyper(\*, m = 70, n = 100, k = 50)

|rel.Err| of the 4 phyper() binom.Molenaar's approximations



### phyper(\*, m = 70, n = 100, k = 70)

rel.Err. of the 4 phyper() binom.Molenaar's approximations



### phyper(\*, m = 70, n = 100, k = 70)

rel.Err. of the 4 phyper() binom.Molenaar's approximations

