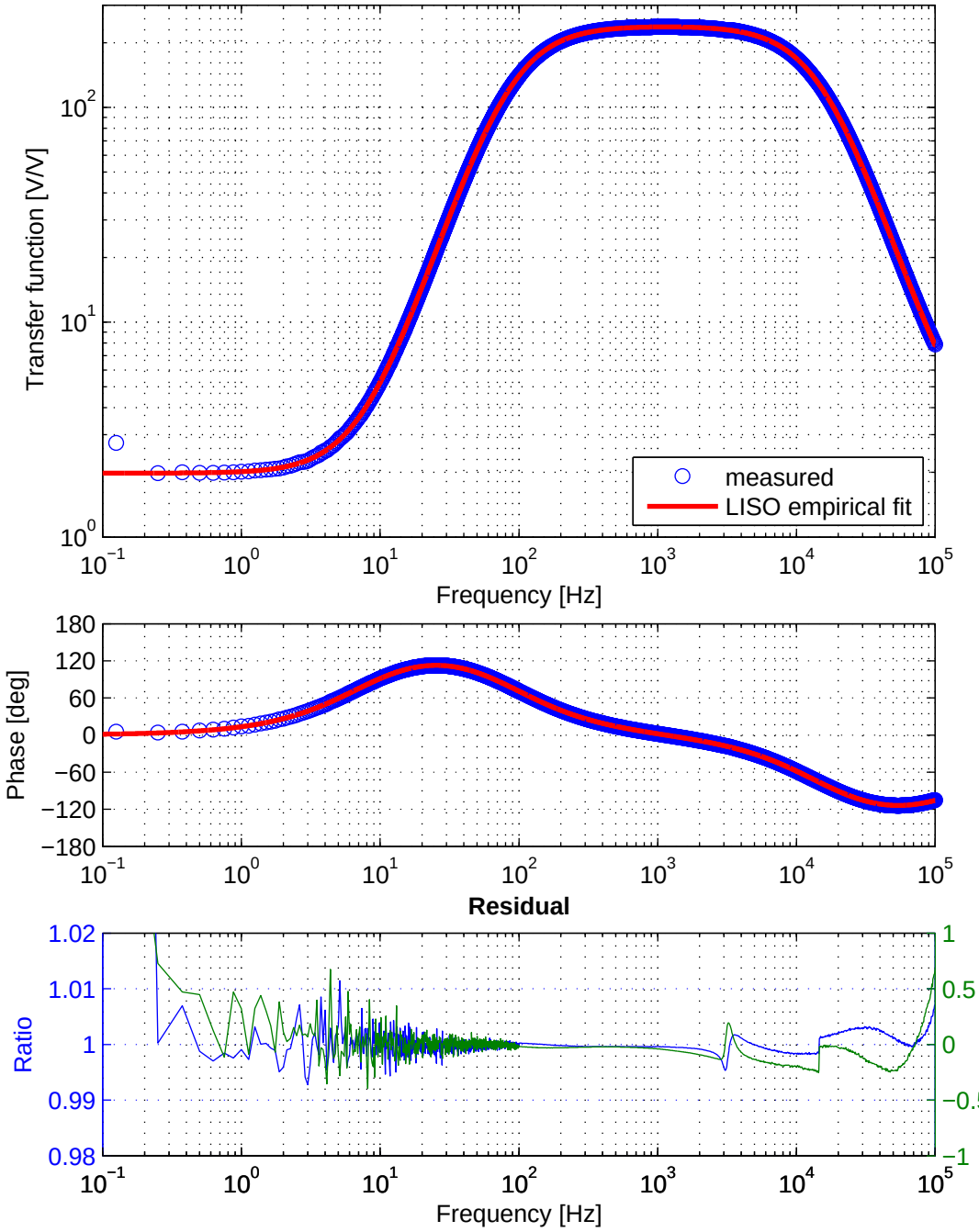
# Preamp #004 / LISO empirical ZPK fit (2013/11/08)




**#LISO SOURCE**
zero 7.6888797467 ### fitted (name = zero0)
zero 7.6888797467 ### fitted (name = zero1)
zero 203.8951136310k 429.3478455409m ### fitted (name = zero2)

pole 78.9118487735 ### fitted (name = pole0)
pole 90.6417057880 ### fitted (name = pole1)
pole 17.7979845020k ### fitted (name = pole2)
pole 13.6911700320k ### fitted (name = pole3)

factor 1.9826044025 ### fitted

param zero0:f 1 100
#param zero1:f 1 100 # use zero0:f = zero1:f due to strong correlation
sparam zero1:f
param zero2:f 1k 1M
param zero2:q 0 100

param pole0:f 1 100k
param pole1:f 1 100k
param pole2:f 1 100k
param pole3:f 1 100k

param factor 1p 1M

fit TF004A.bod absdeg rel

rewrite samebetter

gnuterm pdf

freq log 0.01 100k 10000 ### from data file

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**#Parameter Estimation**

#Best parameter estimates:
#zero0:f = 7.6888797467062959257 +– 1.48m (0.0192%)
#–-> zero1:f = 7.6888797467 +– 1.48m (0.0192%)
#zero2:f = 203895.11363095470006 +– 327.3 (0.161%)
#zero2:q = 0.42934784554092980668 +– 988.1u (0.23%)
#pole0:f = 78.911848773472399898 +– 192.7m (0.244%)
#pole1:f = 90.641705787996272647 +– 215.5m (0.238%)
#pole2:f = 17797.984501992519654 +– 51.78 (0.291%)
#pole3:f = 13691.170031991910946 +– 33.54 (0.245%)
#factor = 1.9826044025026203776 +– 559.1u (0.0282%)