## To do (analysis)

* Circshift of modulation series
* CAPmod fit with DC
* Modulation time series with just 8 CAP\_ampl
* Plot phase modulation time courses
* plot in phase series CAP latency (converted to phase re. f2)
* plot avg modulation phase series
* lef/right button to jump to next repeat of parameter set (only in chrono mode figure.)
* button to close all prmSet windows (as subfunction in plot\_prmSet.m; also to be called when closing main analysis window. Close only prmSet figures that are in original position. Ask whether to close all if other moved figures are open.)
* plot avg prmSet figures
* gb015: variable name “raw\_\*” is messed up
* gp013: raw wave shorter than later recordings
* gb012: raw wave shorter than later recordings and in $results struct. Timing issues due to longer and longer time to save growing struct!)
* plot\_prmSet: include 3f1-2f2 and in CM possibly also intermodulation between 2f1 and f2

# Improvements:

## Calibration

. H\_mic has DC component?

. Higher noise floor in GP data than in GB data.

## Experiment files

. For level-steps and hypoxia, use limited parameter sets put work with #repeats (interval\_order) so that plot\_avg() shows indeed average over parameter set.

## Combi stimulus

. tone duration can be shortened by 20ms to allow recovery for CAP

. lengthen primary onset ramp to improve frequency specificity

# Observations in Data

### 20220802T205328-gb017-combi\_01-21 (l\_BT growth)

* Acoustic modulation around of f2 is different when f1 is present! Mic distortions?
* CM modulation around f2 lower by 10dB when f1 is present! (f2 carrier CM only lower by 1.5dB.) Is inter modulation product with f1 antiphase to the CM of f2 primary, and modulation as well? (Analyse phase difference of f2 carrier and modulation pattern!)
* Why is the BT not prominent in CM spectrum? (Is there a HP filter set?)